# Industrial Policy in Ontario and Quebec

P. Davenport, C. Green,
W. J. Milne, R. Saunders,
and W. Watson

Ontario
Economic
Council

Discussion Paper Series

EDWJ

INDUSTRIAL POLICY IN ONTARIO AND QUEBEC

---

by Paul Davenport, Christopher Green, William J. Milne, Ronald Saunders, and William Watson



---

Discussion Paper Series | Ontario Economic Council

81 Wellesley Street East
Toronto, Ontario
M4Y 1H6

Printed in Canada

ISSN 0702-0643
ISBN 0-7743-6971-X

Paul Davenport is an associate professor in the Department of Economics at McGill University.

Christopher Green is a professor in the Department of Economics at McGill University.

William Milne is an assistant professor in the Department of Political Economy at the University of Toronto.

Ronald Saunders is an assistant professor of Economics at the University of Toronto.

William Watson is an assistant professor in the Department of Economics at McGill University.

This report reflects the view of the authors and not necessarily those of the Ontario Economic Council or the Government of Ontario. The Council establishes policy questions to be investigated and commissions research projects, but it does not influence the conclusions or recommendations of authors. The decision to [illegible]tion of this study was based on its competence and relevar[illegible]cy.

CONTENTS

ACKNOWLEDGEMENTS

This report was drafted under the auspices of the Policy and Economic Analysis Program of the Institute for Policy Analysis of the University of Toronto by Christopher Green, Paul Davenport, and William Watson of McGill University, and William J. Milne and Ronald Saunders of the University of Toronto. The authors are grateful for comments from Richard Bird and from members and staff of the Ontario Economic Council on an early draft of the study.

# 1 INTRODUCTION

Industrial policy, which became the focus of increased public and professional attention during the 1970s, is not new, of course. In the past, industrial policies have ranged from those aimed mainly at adjusting the workings of the market to more aggressive policies designed to influence industrial development directly. However, now it is often alleged that a coherent and activist government role, in the form of a policy package or "industrial strategy", is needed to deal with industrial structure and performance.

This study documents the widespread and increasing use of industrial policies by Ontario and Quebec. After defining "industrial policy" and related concepts, the study identifies policy instruments, compares the available data for Ontario and Quebec, and assesses the justifications the provincial governments have given for these policies. Finally, the study suggests alternative explanations for the apparent growth of industrial policies in Canada that may serve as the bases of hypotheses for suggested future research.

Several terms are used interchangeably for government policies that affect industry. These include "industrial policy", "industrial strategy", "industrial adjustment", and "industrial assistance". Each term has, or should have, a distinct meaning and we shall use them in this paper as follows:

<u>Industrial policy</u>. An industrial policy is any government program that directly affects the economic activity of an industry, company, or plant. Industrial policies are designed to change economic structures, behaviour, and/or performance. They may be either interventionist or non-interventionist. Interventionist industrial policies involve direct control over the way in which resources are allocated. Interventionist policies can be divided into three broad types: innovative, defensive, and adaptive.

Innovative policies promote growth and development; defensive policies protect against undesired economic changes; adaptive policies reallocate resources away from economically declining activities. Non-interventionist industrial policies rely on the market to allocate resources. They range from "hands-off" policies (e.g. free trade) to policies defining the rules of the game (e.g. competition policy) to tax and other policies designed to influence incentives without directly controlling market variables such as price and quality.

Industrial strategy. Often the terms "industrial policy" and "industrial strategy" are mistakenly used interchangeably. Policies, unlike strategies, are not necessarily consistent or coherent. A strategy is a careful plan; an industrial strategy is a package of policies that comprise a conscious government plan with respect to the organization and nature of industrial activity. A government's industrial policies will not necessarily form an industrial strategy. In fact, as we will argue, much of what now passes for industrial policy appears to be without an explicit strategy.

Industrial adjustment is the speed and manner in which the allocation of resources devoted to an economic activity is adjusted in response to changes in demand and supply. Industrial adjustment policies regulate the flow of resources to or from an economic activity. A common rationale for adaptive interventionist industrial policies is that they facilitate adjustment when moving resources away from an existing industry is slow and costly because of a high proportion of fixed costs and specialized resources.

Industrial assistance is a means through which industrial policy, strategy, or adjustment is effected. Industrial assistance operates through various instruments, including cash grants, loan guarantees, regulations, and tax incentives. The purposes of industrial assistance are also various: it may attempt to promote regional growth and development (e.g. DREE grants or provincial development corporations); protect a secularly declining industry (e.g. import quotas for the shoe industry); bail out a firm in temporary (or sometimes permanent) financial difficulty (e.g. Chrysler or Massey Ferguson); or prevent a plant shutdown or reduce layoffs (e.g. Tricofil).

Industrial assistance policies are generally aimed at specific activities,

industries, firms, or locations. They may therefore also be characterized as activity-specific (e.g. tax incentives for investment), industry-specific (e.g. the clothing industry), firm-specific (e.g. Chrysler), or location-specific (e.g. DREE). This categorization may also be applied to all industrial policies.

# 2
# INSTRUMENTS OF INDUSTRIAL POLICY

In this chapter we sketch the wide range of instruments available to governments interested in enacting industrial policies, provide a brief inventory of the use currently made of these instruments by the provincial and federal governments, and discuss inter-provincial competition in industrial policy-making. In our brief discussion of the varieties of industrial policy we will consider five classes of instruments: tax favours, in-kind assistance to firms, cash assistance to firms, regulation (including commercial policy), and government procurement policies.

## Tax favours

The federal government offers several types of tax incentives, aimed at stimulating industrial expansion in general as well as developing particular regions and industries. The first use of corporation income tax relief to encourage industrial activity occurred in 1939, with the allowance of a special 10 per cent deduction in addition to normal consideration for depreciation. Since then adjustments in depreciation rules and tax rates have been used with increasing frequency in an attempt to modify existing investment patterns (see Bird 1980). A second general incentive to investment is the investment tax credit, introduced in 1975 and since extended and enriched several times (Bird 1980).

The federal government also offers a variety of more precisely targeted tax incentives. Probably the most important of these is the reduced rate of tax on small incomes, which has been part of the corporation income tax system since 1919 and is the main reason why the average rate of tax varies significantly across industries, from 30.5 per cent (in 1975) in agriculture, forestry, and fishing, where small firms predominate, to 43.3 per cent in finance, and 47.4 per cent in transportation, communication, and other utilities, where small businesses are

scarce (Boadway and Kitchen 1980, 118).

Special incentives are also aimed at encouraging investment in manufacturing and processing, air and water pollution control, motion pictures, research and development (R&D), and mineral exploration and development (X&D). Since 1972, manufacturing and processing firms have been eligible for accelerated depreciation on new investments and since 1975 their profits have been taxed at preferential rates. Federal tax incentives for regional development date from 1961 and include tax credits and preferential rates for firms investing in designated areas of the country. Motion picture firms are eligible for immediate write-offs on investments (and for grants and reduced rate loans from the Canada Film Development Corporation) while expenditures for R&D and X&D are subject to accelerated depreciation and investment tax credits. According to recent estimates the federal government may pay up to 66 cents on the dollar for new investments in R&D in industry (see Bird 1980, 11) and up to 93 cents on the dollar for petroleum and gas X&D in the "Canada lands" by Canadian firms (Lalonde 1980).

The corporation income tax is not the only vehicle for tax incentives. A number of federal sales and excise tax exemptions also operate to the advantage of different industries and industrial processes. For example, all goods purchased by farmers, all materials, equipment, and supplies used in the development of new products or processes, and all transportation equipment used for carrying freight are exempt from excise taxation.

The provinces also dispense tax favours. To begin with, they are free to vary the corporate tax rates they charge. Ontario and British Columbia have the highest rates (15 per cent top rates) while New Brunswick and Nova Scotia have the lowest (10 per cent top rates). On the surface it may appear that federal aid to the provinces with lower per capita incomes has been at least partly successful in reducing the fiscal burden on these provinces. On the other hand, with the exception of Newfoundland, which has a top rate of 14 per cent, these same provinces apparently still feel obliged to provide general tax incentives on top of what is offered to firms by DREE and other federal agencies. The existence of a corporation tax at the provincial level also means that provinces can encourage various activities by offering tax relief, and most do so. Ontario, for instance, had an investment tax credit before the federal

government did. Interestingly, resource industries are subject to preferential treatment in most provinces, even those that have chosen manufacturing as the axis for future development.

The provinces have also granted sales tax relief to troubled industries at one time or another. For example, in 1978, the Quebec government abolished the sales tax on furniture, clothing, leather goods, and shoes. Similarly, the Ontario government removed the sales tax on furniture and light trucks from November 1980 to June 1981.

## In-kind transfers to firms

Modern governments provide a wide range of goods and services that ultimately benefit business firms. Among the more obvious examples are roads, harbours, electricity, enforcement of contracts, universal education, and various forms of social insurance. Our concern here, however, is with goods and services aimed primarily at business firms. In most instances this means technical assistance in planning, R&D, and marketing. Of these three activities, the provision of information and expertise to firms engaged in exporting accounts for the greatest public expenditure.

The federal Department of Industry, Trade, and Commerce operates several programs for exporters (see Appendix C). The activities involved include trade fairs, promotional tours, market surveys, and co-ordination of Canadian bids on foreign investment projects. In addition, the Export Development Corporation, a federal crown corporation, provides services and financial assistance aimed at facilitating Canadian exporting. The provinces are also active in this area. Quebec has several aid programs for firms participating in exhibitions and searching for new markets, while in 1980 Ontario set up the Ontario Export Development Corporation to assist exporters. The most common rationale for public assistance to exporters is that many Canadian firms are too small to undertake substantial foreign operations on their own.

As noted, the federal government also provides services to firms engaged in industrial R&D. The Department of Industry, Trade, and Commerce runs a number of programs whose function is to disseminate information on new developments in R&D and in some cases to provide laboratory assistance. Similar programs also exist in several provinces.

Cash transfers to firms

At both levels of government substantial amounts of financial assistance are provided to business (see Tables 1, 6, and 12). This aid takes the form of direct subsidies, loans, loans at reduced rates, loan guarantees, grants, and equity purchases. Programs of financial assistance offered at the federal level are listed in Appendix C; we will concern ourselves only with the impact of these programs on the regions.

The federal program with the most obvious regional effects is administered by the Department of Regional Economic Expansion (DREE), established in 1969. DREE's strategy rests on three foundations: industrial incentives to generate employment by making investment more attractive in slow-growth regions; infrastructure assistance to facilitate investment; and social and rural development to provide greater access to labour in rural areas. This strategy has been the subject of a long and at time bitter debate among policy analysts. While some argue that discouraging mobility causes economic inefficiency by persuading factors of production to remain in areas where their marginal productivity - and therefore their incomes - are lower than they would be elsewhere in the country (see Courchene 1970), others contend that the distribution of industries across the country either _is_ not determined by considerations of economic efficiency or _should_ not be determined by such considerations, since private efficiency criteria do not take into account the problems posed by externalities and public goods of one kind or another (see Matthews 1981). No attempt will be made to resolve this controversy here. Instead, we will simply observe that given the goal of regional development there can be little doubt that federal and provincial policies will come into conflict. In fact, as is so often the case in Canada, federal-provincial activity in this area may be subject to a sort of Catch-22: if the two levels of government work in parallel, they may be redundant - though the mere existence of parallel programs does not demonstrate that either is useless (see Bird, Bucovetsky, and Foot 1979, chap. 9); if they work at cross purposes, they may be socially wasteful.

A final difficulty occurs when provinces bid against each other, by means of cash and in-kind transfers, to persuade firms to favour them with investments. While some provinces may succeed in growing more quickly than others as a result of this, there may be a net loss of national

output as firms are pursuaded to undertake uneconomic activities. At the very least, there may be significant transfers from taxpayers to industrialists, often foreign industrialists. There is obviously a trade-off to be arrived at between the (presumably) greater awareness of regional problems at the provincial level and the (often wasteful) effects of interprovincial jockeying for industrial leadership.

## Regulation

Regulation is *par excellence* an instrument of interventionist industrial policy. Regulation takes many forms, including controls over price, output, quality, and the entry and exit of resources. Many regulations have very limited objectives, which cannot be construed either as providing industrial assistance or as embodying an industrial strategy. Among these one might include many controls over service quality, product standards, and rates of return allowed franchised public utilities. In contrast, some regulatory interventions clearly are intended to provide industrial assistance and in some cases, such as the National Policy tariffs, may even fit the description of an industrial strategy.

Perhaps the most important example of regulatory intervention in Canada is protection from foreign competition. In recent years, protective tariffs (first imposed in 1879) have been supplemented by import quotas imposed on textiles, clothing, and shoes. Although, strictly speaking, commercial policy is carried out only at the federal level, some provincial policies have impeded interprovincial trade. Among these are output controls applied to production of some agricultural products by marketing boards exercising supply management powers. In addition, most provinces restrict entry into some industries (e.g. trucking) and control entry into many professional occupations through licensing. Often the effect of output/entry controls is to generate scarcity values for the output of existing producers who, as a result, receive (transitory) capital gains. (Tullock 1975; Borcherding 1981). Of all the instruments of industrial policy, regulation, particularly when it limits output and entry, is the most dubious. Both theory and observation suggest it is the least likely to be consistent with a growth-oriented industrial strategy.

Procurement policy

The quantity and variety of goods and services purchased by all levels of government in Canada indicate the potential importance of public procurement policies for any government interested in manipulating the industrial structure of its jurisdiction. As might be expected, the various Canadian governments have not been reluctant to make use of this instrument of industrial policy.

The federal Department of Supply and Services stipulates that the goods and services it purchases should be produced as near as possible to the point of consumption. Provincial governments have also instituted procurement practices which favour provincially manufactured goods. These range from strongly dirigiste policies such as British Columbia's, which allows purchasing agents to pay up to a 10 per cent premium for provincially-produced goods, and Quebec's, which provides that tenders will be invited only from Quebec firms if there is sufficient competition, to Ontario's, which includes only a vague statement about the desirability of Canadian content. A complete description of provincial policies in this area is provided in Pestieau and Maxwell 1981.

Interprovincial competition and non-tariff barriers to trade

Since all five policy instruments that have been described are available, to a greater or lesser extent, both to the provinces and the federal government, it seems inevitable that difficulties in the co-ordination of federal and provincial industrial policies will arise. The general ascendancy of the provinces since the 1960s has, not surprisingly, been paralleled by an increase in provincial control over regional development policies and by a multiplication of non-tariff barriers to interprovincial mobility, which, as we have suggested, can be interpreted as part of an industrial policy.

The barriers that provinces have erected include restrictions on interprovincial movement of goods, capital, and labour. Restrictions on the movement of goods across provincial boundaries can result from provincial procurement policies or from regulation, such as marketing boards. Restrictions on the mobility of capital, which are a recent development,

range from restrictions on takeovers and the issuance of industrial development permits to tax credits for investors in local projects. Labour mobility can be impeded by means of local hiring requirements. Subsidiary agreements to DREE assistance, for example, state that "the employer shall undertake to train and employ to the maximum extent practicable persons who are residents ... of the designated region in which the facility is location." Needless to say, virtually all of these non-tariff barriers may lead to losses of output by preventing an efficient allocation of resources across the country.

# 3 ONTARIO AND QUEBEC INDUSTRIAL POLICIES IN THE 1970s

While a large number of instruments can be used to implement industrial policies, most of the assistance programs currently in place cannot be considered an industrial strategy since there appears to be no common philosophy underlying them. Many programs are 'stop-gap'. It was not until the middle to late 1970s that a concerted attempt to co-ordinate either provincial or federal government policies was undertaken.

This section reviews the experience of Ontario and Quebec with regard to industrial policies (provincial and federal), highlighting where possible the philosophy behind the programs and their effectiveness. The two discussions of provincial programs have the same structure in order to make comparisons easier.

Appendices A, B, and C contain a more detailed listing of the industrial assistance programs available from the Ontario, Quebec, and federal governments respectively.

## The Ontario situation

The Ontario experience with industrial policy has been varied, with evidence of passive, aggressive, and reactive policies. These policies are based on a wide range of instruments, including cash grants, loan guarantees, low interest loans, tax incentives, government regulations, technical aid, and subsidies.

Table 1 sets out provincial and federal government subsidies to business on a National Accounts basis, and then compares them to gross provincial product (GPP) and business non-residential gross fixed capital formation (GFCF). As these figures indicate, the role of the federal government in providing these direct subsidies is much greater than that of the provincial government. Subsidies usually fall into one of three categories: agricultural (e.g. freight assistance or storage costs), business

TABLE 1
Subsidies to business in Ontario and other provincial data 1961-79
(millions of dollars)

| | 1961 | 1970 | 1974 | 1978 | 1979 |
|---|---|---|---|---|---|
| Subsidies[a] | | | | | |
| A. Provincial | 0 | 1 | 80 | 155 | 204 |
| B. Federal | 83 | 162 | 342 | 528 | 656 |
| Gross Provincial Product (GPP) | 16 490 | 36 258 | 60 363 | 90 131 | 101 594 |
| Gross Fixed Capital Formation Business, non-residential (GFCF) | 1 618 | 4 385 | 6 974 | 9 826 | 11 114 |
| Subsidies/GPP (%) | | | | | |
| A. Provincial | 0.0 | 0.0 | 0.13 | 0.17 | 0.20 |
| B. Federal | 0.50 | 0.45 | 0.56 | 0.58 | 0.65 |
| Subsidies/GFCF (%) | | | | | |
| A. Provincial | 0.0 | 0.02 | 1.15 | 1.58 | 1.84 |
| B. Federal | 5.13 | 3.69 | 4.90 | 5.37 | 5.90 |
| Provincial government spending | | | | | |
| A. Current expenditure on goods and services[b] | 308 | 1 601 | 2 476 | 4 368 | 4 563 |
| B. Gross capital formation | 170 | 285 | 535 | 639 | 618 |
| C. Transfers to persons | 146 | 915 | 1 323 | 2 207 | 2 439 |
| D. All other | 662 | 2 313 | 4 320 | 7 271 | 7 742 |
| E. Total | 1 286 | 5 114 | 8 654 | 14 485 | 15 362 |

a Excludes federal oil import subsidies
b Excludes provincial gross capital formation
SOURCE: Statistics Canada, Provincial Economic Accounts, 1980

(e.g. payments under the National Transportation Act), and payments to cover trading losses (e.g. Canadian Wheat Board).

Of course, direct subsidies do not represent the only way government spending influences the private sector. As discussed earlier, procurement policy is another important way assistance can be given to certain sectors. The Ontario policy is that

> The Ontario government offers a ten per cent price preference for Canadian content in government purchases and encourages other provinces to adopt a Canada-first policy rather than a provincial or regional preference. (Ontario 1980b, 3)

This is one of the less clearly defined provincial procurement policies, but still represents a non-tariff barrier to trade.

The Ontario government has four major policy fields: social development, resources development, justice, and general government. Most of the programs that we can identify with industrial assistance fall under the category of resource development, although the Ministry of Treasury and Economics (under general government) also has some responsibility for industrial assistance programs. Table 2 sets out budgetary expenditure on these policy fields for fiscal year 1978-79 and estimates for fiscal year 1981-82.[1]

The Ministry of Industry and Tourism is responsible for most of the assistance programs. Consequently, in Table 3 we set out expenditure by program for this ministry for fiscal year 1978-79. As is evident from the program headings, transfers to business play an important role for this ministry. Of course, other ministries also have assistance programs. For example, Northern Affairs provides the Northern Communities Assistance Program and the Regional Priorities and Development Program, while the Ministry of Agriculture provides a Farm Tax Reduction program and grants for farm development purposes. The Ministry of Treasury and Economics has recently become more involved in industrial assistance programs through the Board of Industrial Leadership and Development (BILD).

One of the most aggressive policies in Ontario was the establishment of the Development Corporations in 1973. These corporations are the Ontario Development Corporation (ODC), the Northern Ontario Development Corporation (NODC), and the Eastern Ontario Development Corporation (EODC). These corporations offer a comprehensive program of assistance, including loan guarantees, term loans, export support loans, tourism loans, industry park loans, and advisory services. These programs are designed not only to create new jobs directly but also to reduce imports and increase exports. After April 1979, the Development Corporations placed greater emphasis on small business and the encouragement of private financing in combination with government financing. Table 4 sets out some statistics for the corporations' performance. While total commitments fell in 1979-80 from the previous year, loan and loan guarantee

1 Fiscal year 1978-79 is shown here for easy comparison with Quebec data.

TABLE 2
Ontario government statement of budgetary expenditure by policy field (millions of dollars)

| Policy field | 1978-79 | 1981-82[a] |
| --- | --- | --- |
| Social development policy field | 9155 | 12036 |
| Health | 3958 | 5531 |
| Education | 2391 | 2973 |
| Other | 2805 | 3532 |
| Resources development policy field | 1884 | 2447 |
| Transportation and communication | 1068 | 1254 |
| Natural resources | 246 | 322 |
| Agriculture and food | 174 | 288 |
| Housing | 167 | 202 |
| Environment | 122 | 191 |
| Industry and tourism | 60 | 87 |
| Labour | 34 | 56 |
| Energy | 10 | 44 |
| Resources development | 3 | 3 |
| Justice policy field | 501 | 653 |
| General government | 1143 | 1836 |
| Intergovernmental affairs | 510 | 655 |
| Northern Affairs | 125 | 156 |
| Treasury and economics | 21 | 23 |
| Other | 487 | 979 |

a Estimates
SOURCE: Ontario 1979a, Vol. 1

support for small business increased dramatically. Table 5 sets out funds by type of assistance by the Development Corporations since their inception.

An example of a defensive policy followed the American government's introduction of a surcharge on all imports to the United States in the early 1970s. The Ontario government, in response, set up the Export Assistance Program to provide loans to finance exports and obtain orders for small and medium-size businesses. In addition, the Ontario Product Display Centre was set up in 1979 to provide a number of services for exporters.

Recognition of the importance of stimulating exports from Ontario has been evident throughout the 1970s. In the face of increasing international competition, the government announced a trade action plan called "Export '80" in May 1980. This program is designed to increase the level of

TABLE 3
Expenditure by program, Ontario Ministry of Industry and Tourism, 1978-79
(millions of dollars)

| Program | Wages and salaries | Transfers | Other[a] | Total |
|---|---|---|---|---|
| Ministry administration | 2.7 | 0.0 | 0.9 | 3.6 |
| Policy and priorities program | 1.5 | 0.0 | 0.6 | 2.1 |
| Industry and trade development program | 3.7 | 3.1 | 5.7 | 12.5 |
| Tourism development program | 2.1 | 1.6 | 9.4 | 13.1 |
| Small business development program | 2.5 | 0.0 | 2.1 | 4.6 |
| Ontario Place Corporation | 0.0 | 2.7 | 0.0 | 2.7 |
| | | Loans | Other[b] | Total |
| Industrial incentives and development programs | | | | |
| Ontario Development Corporation | 2.7 | 16.3 | 9.4 | 28.4 |
| Northern Ontario Development corporation | 0.4 | 8.4 | 4.9 | 13.7 |
| Eastern Ontario Development Corporation | 0.3 | 15.3 | 3.1 | 18.7 |

a Includes supplies, transportation, etc.
b Includes loan forgiveness, guarantees and losses on loans, interest incentives
SOURCE: Ontario 1979a, Vol. 1

TABLE 4
Ontario development corporations commitments

| | Number of loans and loan guarantees | Millions of dollars | Average loan (thousands) | Estimated new jobs within five years[a] |
|---|---|---|---|---|
| 1978-79 | 377 | 76.0 | 202 | 13548 |
| 1979-80 | 365 | 53.0 | 145 | 8281 |

a Excludes export loans
SOURCE: Ontario 1980c

TABLE 5
Loan disbursements and guarantees from inception to March 31, 1979
(millions of dollars)

| Type of loan | Ontario Development Corporation | Northern Ontario Development Corporation | Eastern Ontario Development Corporation | Total |
|---|---|---|---|---|
| Performance loan | 60.9 | 4.8 | -- | 65.7 |
| Term loan | | | | |
| Industrial mortgage | 55.1 | 14.6 | 6.2 | 75.9 |
| Pollution control | 3.1 | 0.2 | 0.2 | 3.4 |
| Tourist industry | 21.1 | 32.1 | 9.9 | 63.1 |
| Small business | 25.3 | 2.3 | 3.1 | 30.7 |
| Venture capital | 7.4 | -- | 0.6 | 8.0 |
| Export support | 53.1 | 1.3 | 4.9 | 59.3 |
| OBIP[a] | 31.6 | 35.5 | 66.3 | 133.4 |
| Guarantees | | | | |
| Publishing industry | 8.8 | -- | 0.1 | 8.9 |
| Other | 26.5 | 1.9 | 0.5 | 28.9 |
| Ontario industrial parks program | -- | 0.3 | 2.3 | 2.6 |
| Total | 292.8 | 92.7 | 94.1 | |

a Ontario Business Incentive Program Loans
SOURCE: Johnson 1980, 315

financial support for Ontario exporters through loans. In addition, the Ontario Export Development Corporation was set up as a subsidiary of the Ontario Development Corporations. This corporation has as its aims to:

- assist ministries of government, agencies and private companies to expand sales outside Ontario;
- explore world market opportunities...;
- stimulate exports by providing a central agency to pursue capital project activity. (Ontario 1980a, 6)

A special emphasis is given to resource-based industries. The Ontario government established the Mineral Exploration Assistance Program to encourage exploration in early 1970s. The program was replaced by the Ontario Mineral Exploration Program in the 1980 Budget. The aim of this program is to encourage mineral exploration in the province by providing part of the risk capital to the prospector or the non-producing exploration

company through tax credits and grants, with a ceiling of $4 million in aid in 1980-81. This policy is industry-specific, yet has a significant regional component since mining is one of the major sources of employment in Northern Ontario.

A good example of an activity-specific policy was introduced in 1974 when, due to high inflation rates, the Ontario government adopted policies designed to restrain inflation and stimulate supply. In addition to some industry-specific policies, the government introduced a five per cent tax credit on any increase in capital by the firm. In addition, the Venture Investment Corporation was established to help financing for business qualifying for the federal small business deduction.

Small business in Ontario is further aided through the Small Business Development Corporations program, which was established on July 1, 1979 by the Ministry of Revenue to replace the Venture Investment Corporation. These corporations were established specifically to direct funds and provide business and managerial expertise to eligible small businesses. In addition, under the Ministry of Industry and Tourism, the Small Business Development Branch provides advisory services, selective placement services, and assistance programs. The assistance programs include a program to encourage product and process innovation (budget of $160,000 in 1979-80), the small business industry technology program (budget of $229,000 in 1979-80), and the product development management program to increase industrial design (budget of $200,000 in 1979-80).

The Employment Development Fund was established in the spring of 1979. Its stated objective was to increase employment and industrial development in Ontario on a long-term basis (Ontario 1979b). The budget for this program was set at $200 million in 1979-80. The program, with its longer term perspective, required an agreement between the successful applicant and the Government of Ontario to a five-year program that includes such targets as Canadian sourcing, job creation, and investment. In some measure, this program can be considered an industrial adjustment plan in that it provided grants to the automotive industry (creating jobs and increasing investment) and the pulp and paper industry (to install an infrastructure for pollution control and to upgrade capital to improve productivity).

During the late 1970s, there was increasing pressure on the Ontario government to set out an industrial strategy for Ontario. This resulted in

the formation of a new agency, the Board of Industrial Leadership and Development (BILD), and the document "Building Ontario in the 1980s" in January 1981. The responsibilities of BILD were defined as "to consolidate and coordinate the Government's total economic development effort, to provide a focus for economic liaison with the federal government and other concerned interests, and to ensure maximum participation and support for Ontario's development initiatives" (Ontario 1981a, 4).

BILD identified six major themes as priorities for development of the provincial economy: electricity, transportation, resources, technology, people, and communities. The programs under these headings are varied and run the gamut from general to firm-specific policies. For example, research and development initiatives include the establishment of an Auto Parts Technology Centre to aid in the dissemination of information, assistance to Chrysler Canada in building an automotive R&D centre;[2] and establishment of both the Microelectronics Development Centre and a separate CAD/CAM Development and Testing Facility. These programs reflect a significant effort to support high technology industries, which is viewed as a way to obtain significant productivity gains.

With respect to adjustment policies by the Ontario government, it was announced in the BILD program that the Training In Business and Industry program (TIBI) will be expanded. This program enables firms to retain employees whose skills have been made redundant by changes in technology, thereby reducing layoffs.

Also in the area of adjustment assistance, advance notice of termination is required under Ontario's Employment Standards Act.[3] This legislation distinguishes between individual and mass terminations. For the former, the required notice period varies with length of service, up to a maximum of eight weeks' notice for employees with more than ten years of service. The mass termination rules apply when an establishment dismisses at least fifty employees (or ten per cent of employment, whichever is greater)[4] within a four-week period. The provisions for mass termination

2 The Province of Ontario is paying one half the cost of the centre.

3 For a more detailed exposition, as well as information on programs available in other jurisdictions, see Saunders 1981.

4 In the case of partial or complete closing of operations, the ten per cent rule does not apply; that is, only the 'fifty or more' criterion is used.

also apply for temporary layoffs of at least thirteen weeks' duration within any twenty-week period. The notice required in mass termination cases varies with the number laid off: eight weeks' notice when up to 199 individuals are affected, twelve weeks' when between 200 and 499 are laid off, and sixteen weeks' for layoffs of 500 or more. If the employer dismisses an employee before the end of the notice period, a lump sum payment (known as 'pay in lieu of notice') must be made equivalent to the amount of wages the employee would have received over the remainder of the notice period.

As was discussed in Chapter 2, provincial governments sometimes also use the sales tax as an instrument of industrial policy. This was done in Ontario recently with the sales tax rebate program on furniture and light trucks. This policy was designed to protect these industries from changing economic conditions.

## The Quebec situation

As in Ontario, Quebec's experience with industrial policy has been varied. Table 6 sets out some provincial data for Quebec comparable to Table 1 for Ontario. Note that the share of subsidies in Gross Provincial Product (GPP) is greater in Quebec than in Ontario, for both provincial and federal subsidies. This, in itself, indicates a somewhat different structure of the economy. Also note that the relative size of federal to provincial subsidies raises the question of compatibility by the two levels of government with regard to intent and results. Furthermore, government expenditure on goods and services comprises a much greater share of GPP in Quebec than in Ontario. This is an important issue given Quebec's strong procurement policy, which states

> - when sufficient competition exists, only Quebec enterprises are invited to tender;
> - in exceptional cases, the above can be applied even without sufficient competition if it serves industrial development objectives;
> - for contracts exceeding $50,000, a preference of up to 10 per cent is applied to the Quebec content of bids;
> - tenders must state the percentages of Quebec, Canadian, and foreign content (Canada 1980, 35-60).

The Quebec government breaks down its spending into four categories or "missions". Of the total budgetary spending of $13.4 billion in 1978-79,

TABLE 6
Subsidies to business in Quebec and other provincial data 1961-79
(millions of dollars)

| | 1961 | 1970 | 1974 | 1978 | 1979 |
|---|---|---|---|---|---|
| Subsidies[a] | | | | | |
| A. Provincial | 19 | 41 | 73 | 204 | 196 |
| B. Federal | 61 | 159 | 338 | 440 | 558 |
| Gross Provincial Product (GPP) | 10 576 | 21 931 | 35 451 | 55 395 | 62 129 |
| Gross Fixed Capital Formation Business, nonresidential (GFCF) | 1218 | 1901 | 4419 | 6722 | 7848 |
| Subsidies/GPP (%) | | | | | |
| A. Provincial | 0.18 | 0.18 | 0.21 | 0.37 | 0.31 |
| B. Federal | 0.58 | 0.72 | 0.95 | 0.79 | 0.90 |
| Subsidies/GFCF (%) | | | | | |
| A. Provincial | 1.56 | 2.16 | 1.65 | 3.03 | 2.50 |
| B. Federal | 5.01 | 8.36 | 7.65 | 6.54 | 7.11 |
| Provincial government spending | | | | | |
| A. Current expenditures on goods and services[b] | 308 | 873 | 1 890 | 3 424 | 3 607 |
| B. Gross capital formation | 127 | 256 | 512 | 580 | 773 |
| C. Transfers to persons | 271 | 817 | 1 479 | 3 057 | 3 367 |
| D. All other | 331 | 2 006 | 3 242 | 5 926 | 6 427 |
| E. Total | 1 037 | 3 952 | 7 123 | 12 987 | 14 174 |

a Excludes federal oil import subsidies
b Excludes provincial gross capital formation
SOURCE: Statistics Canada, Provincial Economic Accounts, 1980

$1.7 billion was under the economic mission, which includes almost all industrial assistance. Table 7 sets out the ten government departments with the highest shares of economic spending in total spending. The government department most directly responsible for formulating and implementing industrial assistance policies is Industry and Commerce, whose ten major spending programs are shown in Table 8. In five of these programs, most of the budget is devoted to salaries. These programs provide direct technical and statistical assistance to firms and help formulate and implement department policy. Three other programs account for virtually all of the transfers: the Development of Maritime Fisheries,

TABLE 7
Quebec government spending on the economic mission, by department, 1978-79
(millions of dollars)

| Department | Spending on economic mission (1) | Total spending (2) | Economic as a share of total spending (3) | Transfers (4) | Transfers as a share of total spending (5) |
|---|---|---|---|---|---|
| Agriculture | 243 | 243 | 100% | 140 | 58% |
| Natural Resources | 56 | 56 | 100 | 9 | 16 |
| Immigration | 14 | 14 | 100 | 1 | 7 |
| Industry and Commerce | 109 | 114 | 95 | 70 | 61 |
| Lands and Forests | 105 | 124 | 85 | 1 | 1 |
| Transportation | 937 | 1 137 | 82 | 350 | 31 |
| Environmental Protection | 21 | 27 | 78 | 9 | 33 |
| Labour and Manpower | 50 | 70 | 71 | 21 | 30 |
| Consumers, Co-operatives, and Financial Institutions | 9 | 19 | 49 | 1 | 5 |
| Tourism, Fishing, and Hunting | 46 | 118 | 39 | 9 | 8 |
| All other departments | 111 | 11 481 | 1 | 9 497 | 83 |
| Total | 1 701 | 13 403 | 13 | 10 108 | 75 |

SOURCE: Quebec 1979a, 1-15, 1-31

with over half its budget devoted to fish processing; SDI, to be considered below; and Orientation and Development of Secondary Industry, which spend $39 million in transfers, of which very few went to private firms.

A major source of industrial subsidies to private firms in Quebec is the Société de développement industriel du Québec (SDI), whose cumulative assistance payments from 1971 to 1980 totalled $641 million, not including $52 million in loan guarantees.

SDI was formed by the Quebec government in 1971 to promote Quebec's economic development and the rationalization of its industrial structure. At the same time, this new government corporation took over the mandate of l'Office de crédit industriel (which had operated from 1968 to 1971) to grant loans to firms unable to get credit elsewhere at reasonable rates. SDI acts as a development corporation in some programs and as a financing corporation in others.

As a development corporation, SDI administers grants programs with criteria that are intended to guide and stimulate the development of Quebec's industrial structure. Grants are most commonly awarded in the form of partial reimbursement of interest on privately obtained loans. In negotiations, SDI links its financial assistance to the purchase by aid recipients of goods and services produced by other Quebec firms, and to increases in export sales. To qualify for a grant, an applicant must already have investments in land, buildings, or machinery, or hold patent rights. Manufacturing grants may cover anywhere from five to thirty per cent of an investment, with the percentage awarded decreasing progressively for investments over $2 million. In general, export assistance grants are fixed at two per cent of the firm's exports, which must be processed goods.

As a financing corporation, SDI acts as a lender of last resort to assist companies that cannot obtain private sector financing. Such assistance may take the form of loans at market rates, loan guarantees, or equity participation.

The mandate of SDI has expanded considerably since 1971, with a program of financial assistance for Quebec companies exporting manufactured goods added in 1974. In 1977, SDI began to administer two programs within the framework of Opération solidarité économique (OSE), namely the financing of small business firms and the financing of firms in traditional industries (textiles, hosiery, clothing, shoes, and furniture). The year 1979 brought SDI an assistance program for high-growth firms, as well as an expanded export assistance program providing export market development credits and export sales credits. Finally, SDI began in 1979-80 to administer a program of loans and grants for firms in the tourism sector.

The activities of SDI are aimed primarily at the manufacturing sector, with some assistance to tourism. Grants are not made to other services or

TABLE 8
Expenditure by program, Quebec Department of Industry and Commerce, 1978-79 (millions of dollars)

| Program | Expenditure | | | |
|---|---|---|---|---|
| | Total | Salaries | Transfers | Others |
| Internal management and support | 5.4 | 4.3 | 0 | 1.1 |
| Economic research | 1.3 | 1.2 | 0 | 0.1 |
| Orientation and development of secondary industry | 58.9 | 7.3 | 38.9 | 12.7[a] |
| A. Sectoral policies and strategies | 11.5 | 1.9 | 0.5 | 9.1[a] |
| B. Search for investment possibilities and market expansion | 5.2 | 1.9 | 1.4 | 1.9 |
| C. Infrastructure for welcoming industries | 36.1 | 0.5 | 35.0 | 0.6 |
| D. Counsel and assistance for firms | 5.9 | 3.0 | 1.9 | 1.0 |
| The Quebec Centre for Industrial Research | 6.0 | b | b | b |
| Société de développement industriel du Québec (SDI) | 24.6 | 2.1 | 21.6 | 0.9 |
| Corporation for an Industrial Park in Central Quebec | 3.7 | 0.3 | 0 | 3.4 |
| Services to commercial establishments | 0.9 | 0.6 | .04 | 0.3 |
| Development of maritime fisheries | 15.2 | 5.2 | 3.8 | 6.2 |
| Central statistics services | 4.6 | 4.0 | 0 | 0.6 |
| Standardization and specifications | 0.7 | 0.6 | 0 | 0.1 |
| Total | 114.1 | 25.5 | 70.3 | 18.3 |

a Includes $7.3 million in loans
b Not available
SOURCE: Quebec 1979, 1-217 to 1-227

commercial enterprises, nor are they available for mineral extraction.

SDI's efforts are principally directed towards small and medium-sized enterprises. In 13 years (including the operation of its predecessor), SDI has directly assisted 2200 companies with over $837 million in financial assistance of various forms.

Grants and loans by SDI in 1979-80 rose to $143.1 million from $94.3 million the previous fiscal year, while the number of projects approved reached 583, up from 425 the year before. The average loan in 1978-79

was about $200,000, the average grant about $225,000. Grants are authorized by the Minister of Industry, Trade, and Tourism (MICT). Under its amended charter, however, SDI can now directly authorize loans without obtaining approval from MICT or other government departments. Assistance is granted under eight different programs, which are displayed in Table 9 along with authorized expenditures and number of firms aided in 1979-80 and 1978-79.

The Operation solidarité économique is a collection of policies instituted in October 1977 in an attempt to underwrite employment in key industries and to reduce unemployment by providing increased temporary work. In total, the government spent some $500 million dollars over the years 1977-79. The programs that were offered as part of OSE included: aid to youth employment, job sharing in the private sector, on-the-job training for students, job subsidies, subsidies for employment in cultural activities, subsidies for firms who hired workers off welfare rolls, investment stimulation, public works employment, and community employment.

Since 1972 the Quebec government has also tried to influence industrial structure through "commissariats industriel", or industrial commissions, autonomous organizations whose objective is to stimulate and accelerate the economic growth and development of a region through merger, expansion, and initiation of enterprises. Members of the controlling board of directors are chosen by the general membership, which represents local (regional) interests. Local municipalities usually play a prominent role in these bodies, providing much of the funding, and with municipal officials sometimes serving on a commission's board of directors. Such membership is benevolent in nature; only regular employees are paid. Boards of directors usually have seven to eleven members (the range recommended by MICT).

The government has encouraged these commissariats by meeting with local officials and offering technical and financial support. The MICT program Aide aux commissariats industriels pays up to 50 per cent of commission costs, to a maximum of $45,000, providing certain criteria are met. Direction de l'infrastructure industriél of MICT also provides technical assistance for recruiting personnel, setting up organizations, and educating commission members. Over 50 commissions received MICT funding in 1978-79 and 1979-80.

The industrial commissions work within a framework established by

TABLE 9
Société de développement industriel du Québec

| Program name | 1979-80 Authorizations | Number of firms aided | 1978-79 Authorizations | Number of firms aided | Forms of assistance |
|---|---|---|---|---|---|
| | $ | | $ | | |
| Financial assistance to advanced technology manufacturing firms | 68 872 770 | 244 | 38 444 425 | 137 | grants, loans, loan guarantees, equity participation |
| Financial assistance to high-growth firms | 2 928 700 | 21 | - | - | grants, loans |
| Financial assistance for mergers and acquisitions | 6 908 800 | 26 | 8 343 200 | 24 | grants, loans, loan guarantees, equity participation |
| Export Assistance Program | 35 258 200 | 129 | 21 160 235 | 69 | grants, loans, loan guarantees, equity participation |
| Financing of manufacturing firms | 14 501 000 | 21 | 9 250 000 | 17 | loans, loan guarantees, equity participation |
| Financing of small manufacturing firms (OSE) | 6 977 350 | 115 | 8 615 000 | 146 | loans |
| Financing of firms in traditional sectors (OSE) | 5 862 000 | 22 | 8 495 000 | 32 | loans |
| Financial assistance for in the tourism sector | 1 833 500 | 5 | - | - | loans, grants |
| Total | 143,142,320 | 583 | 94,307,860 | 425 | |

SOURCE: Societé de developpement industriel du Québec, Annual Report 1980

the Quebec government, and according to "modalities" jointly agreed upon by themselves and the government. Their purpose is to identify local entrepreneurs and investors capable of creating new businesses, interest them in investment, stimulate expansion or develop new markets and products, establish plans of action with these people, inform them about aid programs, and help them to benefit from them. There have also been attempts to attract foreign investment.

## Federal government assistance to Ontario and Quebec

There are literally hundreds of federal government programs that have some impact on Ontario and Quebec. We will not describe all of these programs, but rather focus our attention on a few that have major impact on these provinces. A listing of industrial assistance programs can be found in Appendix C.

As Simeon (1977) points out, there were some 300 different joint federal-provincial programs in 1975. While there are some efforts at co-ordination between policies, often the federal and provincial governments work independently. Some programs duplicate each other; others are fragmented in the sense of being split across jurisdictions; some programs neutralize the effects of others, while incursion occurs when policies at one level of government affect programs at other government levels.

An example of an overlap in policy is provided by the export assistance programs of the federal and Ontario and Quebec governments. On the federal level there are three basic assistance programs: the Export Development Corporation (EDC), which provides insurance, guarantees, and long-term loans for exporters with several regional offices; the Program for Export Market Development, which provides an incentive where there is a need to share the financial risk of developing a foreign market; and the Promotional Projects Program, which underwrites a portion of the cost to industry of participating in promotional events.

The Ontario government, through its Export '80 program, has a number of initiatives that parallel those of the federal government. A report on this program (Ontario 1980a, 14) states "because national economic diversity means that national economic priorities will not always coincide with our province's priorities, Ontario must play an expanded role in trade promotion." Ontario provides support to trade fairs, maintains

foreign offices, and finances the production, warehousing and sale of goods for export. The Quebec government also has a number of programs aimed at encouraging exports which, at least in part, overlap the federal initiatives. Some of these programs are listed in Appendix B under Ministére de l'Industrie, du Commerce et du Tourisme.

A significant regional/industry policy program is undertaken by the federal Department of Regional Economic Expansion (DREE). The department was formed in 1969 in order to spur economic growth in the lagging regions of the country. Associated with DREE was the Regional Development Incentives Act (RDIA), which was designed to stimulate industrial expansion in the designated regions by providing grants to firms starting a new manufacturing or processing operation. In recent years, emphasis has shifted towards expansion and modernization of existing plants. The qualifying region in Ontario is Northern Ontario including Parry Sound and most of Nipissing, while in Quebec the entire province is included with the exception of the Montreal Special Area, which is given special treatment.

For the fiscal year ended March 31, 1978 the breakdown of offers accepted is given in Table 10. This table shows the estimated incentive amount and the expected direct jobs created and the incentive per job for Ontario and Quebec. For this fiscal year (and all others) Quebec has benefited the most in absolute terms with regard to direct job creation compared with all provinces.

In addition to the RDIA program a series of subsidiary agreements under ten-year General Development Agreements (GDA) were signed in 1974. This program allowed provinces to have a greater degree of participation in planning. For example, for the Canada-Ontario GDA, 1974-1984, Table 11 sets out the active agreements.

Some of these programs have a strong regional content, while others help particular industries. For example, the pulp and paper agreement provides incentives for capital expenditures relating to pollution abatement, modernization of production, and efficient energy utilization. On the other hand, the Eastern Ontario agreement covers a broad range of industries including agriculture, forestry, minerals, tourism, and small business incentives designed to stabilize and diversify the economy.

Aid to adjustment - as opposed to development - is offered at the federal level, by the Canadian Employment and Immigration Commission (CEIC), which administers several labour market adjustment programs.

TABLE 10
Regional Development Incentives Program, fiscal year ended March 31, 1978

| | Estimated Incentive Amount (thousands of dollars) | Expected direct jobs | Incentive per job ($) |
|---|---|---|---|
| Ontario | 5 537 | 835 | 6 631 |
| Quebec | 66 350 | 8 607 | 7 709 |

SOURCE: Canada 1978a

TABLE 11
Active agreements under the General Development Agreements between Canada and Ontario

| Agreement | Term | Federal commitment | Provincial commitment | Total |
|---|---|---|---|---|
| Northeastern Ontario | 1976-82 | 14.5 | 14.5 | 29.0 |
| Single-Industry Resource Communites | 1976-81 | 10.2 | 9.6 | 19.8 |
| Community and Rural Resource Development | 1977-83 | 4.75 | 4.75 | 9.5 |
| Forest Management | 1978-83 | 41.1 | 41.1 | 82.2 |
| Pulp and Paper | 1979-84 | 50.0 | 100.0 | 150.0 |
| Eastern Ontario | 1979-84 | 25.2 | 25.2 | 50.4 |

SOURCE: Department of Regional Economic Expansion Subsidiary Agreement Documents, 1980 Review, June 17, 1980

The Canada Manpower Mobility Program provides cash grants for individuals who must move to find a new job. The amount of support varies with family size. Assistance is available only to workers with incomes below a limit that varies with the number of dependents and the length of time the worker has been unemployed.

The CEIC also administers the Canada Manpower Training Program. Two types of training assistance are available. Each is adjusted to the needs of the labour market, as established by a federal-provincial Manpower Needs Committee in each province. One method of support for training involves the purchase of courses from colleges and vocational

schools and the provision of living allowances (or unemployment insurance) for the trainees. The second approach, known as the Canada Manpower Industrial Training Program, is employer-based. The employer is reimbursed by the CEIC for both direct training costs and part of the wages of trainees.

Adjustment Assistance Benefit (AAB) Programs have been devised for workers in the footwear, tanning, textile, and clothing industries who are laid off as a result of a reduction of barriers against imports. The emphasis of the AABs is to guarantee workers with obsolete skills a basic income until age 65 (when social security and social insurance plans become effective).

In January 1981, the federal government announced the creation of a three-year Special Industry and Labour Adjustment Program, under which communities and/or industries may be designated as requiring special adjustment assistance such as direct job creation in the community, wage subsidies to employers hiring workers who were laid off and facing little prospect of early re-employment, and incentives to encourage firms to invest in the affected communities (provided the project is 'viable' but would not be undertaken without program assistance). The budget of the program is a rather meagre $350 million, however, and a government press release (Canada 1981, 6) states that only the most severe cases of community disruption are to be designated as eligible for benefits under the program. Furthermore, it is not clear why viable projects need federal assistance. If the rationale is an infant industry argument, it remains unclear what this has to do with alleviating community disruption: the two issues appear to be independent. And the question of how much federal support of social services should be provided to declining, "nonviable" communities remains open.

Adjustment assistance is also available through Manpower Adjustment Committees. These are established, where an employer agrees, as a mechanism for joint management-labour consultation and planning with regard to adjustments to technological change or layoffs. The administrative costs of a committee are shared by the CEIC, the Ontario Ministry of Labour, and the employer. Officials of the Canada Manpower Consultative Service (CMCS) act as advisors, co-ordinating the application of the various services and programs of Canada Manpower. These include, in addition to the programs discussed above, the Manpower Mobility Incentive

Program, which is designed specifically to operate in conjunction with the adjustment committees. Where an adjustment committee recommends that employees be transferred to another plant of the same employer or an employer agrees to reimburse workers in a single industry community for the expenses of moving to take up employment elsewhere, the CMCS may pay up to fifty per cent of the cost.

## Industrial Policy in Quebec and Ontario: An Industrial Strategy?

### The Quebec case

In 1979, after three years in office, the Parti Québécois government published a 500-page statement on economic policy, Batir le Québec. This document states that while "a host of business assistance programs" were put in place after 1960, the government did not succeed in creating a "real industrial strategy" (Quebec 1979b, 4).

In fact, it is probably the case that before 1979 government industrial policy did not have clear, consistent goals and hence was not based on an industrial strategy. In 1974, the Department of Industry and Commerce published Une politique économique québécoise, which was devoted to industrial policies. This source sets out a number of criteria for allocating industrial assistance, which are generally consistent with those in Batir le Québec:

1 low degree of foreign ownership
2 high degree of French Canadian ownership
3 advanced technology
4 high growth potential
5 high export propensity
6 high propensity to purchase inputs from other Quebec firms
7 special aid for small business.

The problem with these criteria is that they are often inconsistent in practice. The inconsistency is evident in a study of the ownership of manufacturing industries in Quebec in 1961 by Raynauld (1970). He found that French-Canadian-owned firms were lower than average in size, productivity, and propensity to export relative to foreign-owned firms. It is

also often the case that advanced technology firms have a propensity to import materials and components and thus violate criterion 6.

There are many references in Batir le Québec to comparative advantage. For example,

> the redevelopment of economic forces the government intends to promote is based on three major objectives:
> developing and strenghtening certain basic activities in the area of production of goods and services;
> developing Quebec's natural resources and comparative advantages;
> adapting the most vulnerable sectors to international competition. (Quebec 1979b, 91)

However, this concern about comparative advantage is often not evident in the paper's policy proposals. For example, in the agricultural sector it is argued that government should aid in "export expansion and import substitution, in order to improve the balance of trade and thereby promote self-sufficiency in food products" (Quebec 1979b, 97).

Self-sufficiency, of course, is the very antithesis of comparative advantage, which means that regions should specialize and trade.

Both the forestry and fishing industries are to be given assistance to help modernize plant and equipment and to aid in marketing. The government also intends to restructure the tourist industry, where the goal is to re-establish a positive balance of payments, by promoting:

> the establishment of incorporated firms in place of individual firms, in order, on the one hand, to increase the financial and hence management capacity and, on the other, to achieve either horizontal or vertical concentration so as to lower costs and thus increase the competitive position of the Quebec tourist industry. (Quebec 1979b, 134)

No mention is made in the study, however, of the conflict between diversification and concentration which may arise when the government claims that, due to high prices for lodging, "we must therefore innovate and diversity the existing structures." Nor is the possibility raised that the government's francization program may conflict with its attempts to stimulate tourism.

Concern about Quebec's basic industries, which include chemicals, petrochemicals, steel, and transport, also leads to special attention to these industries for

> without the presence of certain key industries, which are not

> necessarily those based on comparative advantages, it is difficult for an economy to make the most of its potential and to develop. (Quebec 1979b, 151)

Hence each of these industries will receive aid of one kind or another, apparently without regard to their profitability. In the petrochemical industry there are four provincial governments working on petrochemical facilities. This may mean that Quebec has no choice but to provide aid, though a better solution may be better policy co-ordination through the federal government.

A great deal of aid has also been provided for the textiles, knitwear, clothing, and footwear industries. The Quebec government regards abandoment of these vulnerable sectors as "unthinkable and not desirable even from a strict economic point of view" (Quebec 1979b, 161).

In summary, it is difficult to discern an industrial strategy in either the existing or proposed set of assistance policies and even more difficult to discern the influence of Batir le Québec's avowed belief in comparative advantage.

### The Ontario case

As in Quebec, concern about industrial strategy became more prevalent in Ontario in the late 1970s. Before this time, policies were aimed at helping certain sectors of the economy, usually with significant regional implications. For example, the Ontario Mineral Exploration Assistance Program, while aiding exploration and development of the mining industry, in addition led to particular development in Northern Ontario. More recently, special sales tax cuts were introduced in November 1980 in an effort to help the furniture and light truck industries cope with economic conditions (in particular, with high interest rates).

However, in 1980 the Board of Industrial Leadership and Development was established to consider industrial policies and economic growth. This resulted in a significant statement on an industrial strategy in January 1981 entitled Building Ontario in the 1980's (with four related background papers). In the introduction to this statement the government recognizes "the growing pressures caused by slowdowns in the world economy, increasing oil costs, and even more competitive industrial technologies, require a definitive act of economic will and resolution" (Ontario 1981a, 2).

Indeed, the report goes on to suggest that increasing the adaptability of the economy is the most important endeavour and solicits the support of all economic agents in achieving the goals of more jobs, diminished inflation, increased trade, and productivity gains.

A great deal of emphasis is placed on technology in this report. "Productivity improvement on the scale that is required will come from the new technologies, such as microelectronics and biotechnology, and the emerging industries that will be built on these technologies" (Ontario 1981a, 26).

This statement indicates the importance that the Ontario government places on productivity gains. By providing assistance to these high technology industries, the government hopes to attain productivity gains which will ensure Ontario's competitiveness. There is no discussion, however, about whether these industries should actually be pursued in Ontario on comparative advantage grounds.

In the area of resources, the overall strategy is stated as "to assure long term supplies, and maximize the economic benefits from its resource base" (Ontario 1981a, 20). Here we see the overlap between industrial and regional policy. Some $400 million is proposed to aid in the agriculture, forestry, and mining sectors; much of this assistance is to go to Northern Ontario, where two-thirds of all jobs are in mining and forestry.

The government also recognizes the need for adjustment in the labour force due to changing economic conditions: "As the economy adapts to higher energy prices, tougher international competition, huge new resource development projects and the impact of new technologies, so must Ontario's labour force adapt." (Ontario 1981a, 33)

This statement goes on to discuss both retraining programs and pension portability as well as other adjustment policies.

While this document serves as an important starting place for the development of an industrial strategy, there is still some need for rationalization on economic efficiency grounds. Furthermore, as Shepherd (1981, 45) points out, the outlay for the program over five years is only $750 million: "at nine-tenths of one per cent of the provincial budget (it) is not of heroic proportions."

It is also noteworthy that the Ontario government has been seeking more interprovincial co-operation. As Grossman (1981, 41) has indicated:

Narrow provincial strategies designed to capture portions of an already

small domestic market just won't work. They prevent us from developing economies of scale and result in high levels of import penetration.

This recognition of the problems associated with non-tariff barriers to trade between the provinces may also be seen to form part of Ontario's industrial strategy, though Ontario's recent discovery of the virtues of interprovincial free trade may perhaps be received with some scepticism by other provinces.

# 4
# EXPLANATIONS FOR THE APPARENT GROWTH OF INDUSTRIAL POLICIES IN CANADA

In this chapter we outline briefly six possible explanations for the apparent growth of industrial policies in Canada. Except for the reference to "province building", the explanations are general in the sense that they could apply to federal as well as provincial government policies. The list considered here is not exhaustive, nor are the explanations necessarily mutually exclusive, although they do tend to be substitutes rather than complements. Our purpose here is neither to assess the degree of conflict or complementarity between the explanations nor to attempt to weigh the evidence for or against each of the explanations. Rather we believe it sufficient for the moment to indicate that the door cannot be closed on a variety of possible explanations and that a fundamental role for further research in this area is to frame the explanations as testable hypotheses and to assess the evidence for and against each of them. Thus this section can be viewed as a necessary preliminary to the final chapter in which several such hypotheses are outlined.

## An increased concern with "market failure"

One possible explanation for the apparent growth of public intervention in industry is that it is a response either to increased market failure, to an increased awareness or perception of the existence of market failure, or to the increased ability or desire of governments to respond to market failure. Examples of market failure include the existence of important externalities that arise from the non-marketed contribution in consumption or production of a commodity; of "publicness" in the character of goods and services provided; of substantial differences in the amount of information available to the different participants in the market; of substantial gaps between social and private risks (e.g., small firms engaged in R&D on new processes or products); or of pockets of substantial market power. The

rationale for government intervention to offset market failure arises from the fact that the actual output from some sector of the economy diverges from the output that is (somehow) determined to be "socially optimal".

No doubt many examples of actual government intervention (e.g. pollution abatement, regulation of public utility natural monopolies, fisheries policies, public provision of services such as education and health, hazardous products legislation, venture capital made available by industrial development banks, the anticombines laws) are intended to correct for the (at least perceived) failure of markets to provide a satisfactory allocation of resources. Indeed, in some of these areas there has been a considerable increase in activity in the last decade. Nevertheless, in most cases it is hard to regard the policies described in the preceding sections as being intended to compensate for the usual types of market failure. The tremendous growth in industrial assistance, whether measured in dollars or programs, does not have any obvious relation to the traditional forms of market failure and the specific examples of intervention designed to remedy them, although, as will be argued below, it is possible to see them as being aimed at market deficiencies that to date have not received much attention in the theoretical literature.

## The National Policy: economic policy as cultural expression

From an historical perspective, the current industrial policy rage can be seen as only the most recent manifestation of what has been a habitual mode of thought for Canadians for at least a century. While the objectives of policy are not new, the policy tools undoubtedly are more sophisticated than they used to be. Industrial policy certainly is not novel in Canada. The first coherent industrial strategy in post-Confederation Canada was the National Policy of 1879. The high tariff wall the policy erected served to strengthen existing patterns of industrial growth by forecasting manufacturing development in Ontario and Quebec. The policy's other arm -- the subsidies and land grants that enabled completion of the intercontinental railway -- provided further encouragement to east-west trade and therefore to domestic industrial growth. This attempt to promote the growth of the manufacturing sector, which remains the centrepiece of Canadian industrial policy, has had mixed results. While it probably has made Canada a more industrialized country than it would have been without

the National Policy, it has contributed to significant foreign ownership of Canadian industry and has also fostered substantial inefficiency in some sectors of manufacturing.

An obvious corollary to this argument is that the "negative" effects of the National Policy -- high levels of foreign ownership and inefficient manufacturing -- are one reason for current federal and provincial industrial policies. FIRA and the Canadianization of the petroleum industry are obvious examples of federal industrial policies to deal with the foreign ownership issue. The provincial governments are less openly hostile to foreign ownership -- indeed, many of them are openly hostile to FIRA -- but both federal and provincial governments have supplied substantial aid to ailing firms and "soft" industries whose very real deficiencies may be largely the result of the tariff. This strategy, if it is a strategy, is obviously a very poor second-best solution, unless for some reason the tariff is considered untouchable.

## Domestic stagflation and external economic shocks

Domestic stagflation and the sudden structural changes that have taken place in the world economy have also been an important influence on the attitudes of citizens and governments alike toward the question of industrial policy. Not only did the rate of economic growth decline significantly during the 1970s, but difficult domestic industrial adjustments were necessitated by dramatically changed conditions in the international marketplace. While the major watershed was 1973, when OPEC first became aware of its own strength, other factors also played a part. These other factors included the formation of trading blocs and the growing importance of the textiles and clothing industry in third world countries. A substantial part of what is usually described as industrial policy represents protection of, and assistance to, domestic industries threatened by external economic changes.

Government concern over slow growth and competitiveness is reflected in the decision of the federal Ministry of Industry, Trade and Commerce in February 1978 to set up twenty-three sectoral task forces to examine what government and the private sector could do to improve manufacturing. Among the recommendations emerging from this process were an increase in government research and development funding, a reduction in government

regulation, and further tax incentive programs to aid capital formation -- all classic forms of industrial assistance.

## Province building

The apparent surge of interest in industrial policy making in Canada in recent years may in large part be the result of efforts at "province building" by the respective provincial governments. In this view, the important thing about industrial policy making is not so much the substance of what is attempted but the simple fact that it occurs at the provincial level.

Most economic analyses of the problems of federal states have had a normative bent. Given the nature of the goods government may be asked to deliver and the ways in which public preferences are sounded, the question which has received the most attention is: "which levels of government should get what powers?" (See, for example, Breton and Scott 1978.) While this is an appropriate approach to economic constitution making, it is less helpful in the conduct of day-to-day activities or in the assignment, once jurisdictions have been established, of new powers as technologies change.

A positive approach to the problems of federal states suggests there is likely to be a ratchet effect in the assignment of powers. While it is possible, even after a constitution has been written, that new jurisdictions will emerge -- a Canadian example is the federal-provincial conference, which is not mentioned in the BNA Act but by now has attained all but statutory authority -- existing jurisdictions are unlikely to be phased out of existence, except perhaps under duress. Thus the original surrender of provincial powers to the federal government in the 1860s occurred only after considerable pressure had been applied by the Colonial Office (see Creighton 1967) while the second great surrender of powers in the 1930s and 1940s required the combined exigencies of economic collapse and total war. By the same token, municipal governments doubtless would not have declined to their present status as administrative arms of the provincial governments had not the BNA Act made them legal creatures of the provinces.

Once different jurisdictions have been established, however, and granted independent -- or occasionally overlapping -- sovereignty over

various areas of policy, there would seem to be a natural desire on the part of the politicians in charge of each of these jurisdictions to expand their jurisdiction's influence as much as possible and to fill regulatory gaps as they emerge. This may lead in the end to a variant of the "Prisoner's Dilemma", in which each jurisdiction attempts to enter a legislative field before -- or at the very worst, as soon as possible after -- the other.

The same cost-benefit calculus that makes protectionist policies attractive to federal politicians is also important to provincial politicians. Hence the desire of provincial governments, after the "dark years" of the 1940s and 1950s, to establish industrial policies of their own. The growth of barriers to interprovincial trade (which has been so clearly documented by Pestieau and Maxwell 1980) is thus consistent with rent-seeking behaviour and the emphasis on fixities in household production functions discussed below. The peculiar historical circumstances of the 1960s must also be mentioned. The surge of Quebec nationalism that followed the Quiet Revolution was bound to make the Canadian confederation less centralized. The reluctance of federal politicians to provide special status of one kind or another for Quebec meant that increasing power for that province was bound to involve increasing power for all other provinces.

From this perspective, it is possible to see the recent spurt of interest in provincial industrial policy as a necessary response of provincial politicians to the DREE initiatives of the late 1960s. On the other hand, whether federal withdrawal from the field would induce a corresponding reduction in provincial policy is not clear.

## Rent-seeking and rent-maintaining behaviour

A quite different explanation for the apparent increase in industrial assistance builds on the positive theories of regulation developed by Stigler, Jordan, Peltzman, and others. These "new" theories argue that economic agents will make use of the political process in an attempt to increase their incomes. By emphasizing that interest groups effectively demand assistance and that politicians, regulators, or other persons in a position of legal authority may be willing to supply it, the new theories have been able to apply the tools of economics to political analysis.

The new theories of regulation have commanded attention for at least

two reasons. First, they purport to explain much of the growth in government intervention in general and regulation in particular within a behavioural framework. Second, they help to explain the practical irrelevance of the policy preferences flowing from traditional economic analysis. Although economic theory often suggests that industrial policies can have effects that on balance are wasteful and, when it does sanction activism, generally prefers non-interventionist to interventionist measures, and adaptive to either protectionist or innovative ones, the political process invariably seems to reverse these policy preferences.

A natural argument for the "new theorists" of regulation is that the growth in government intervention in the economy since the 1930s, while motivated at least partly to secure such laudable goals as economic stability, income security, and the provision of public goods, also opened wide the doors to intervention for more insidious reasons associated with "private" rather than "public" interest. Once government's role in the economy was enlarged, it became hard to hold the line against interventions serving purposes that aimed more at private gain than public good. In this context, industrial assistance can be viewed as analogous to protective regulation and simply the latest phase of a growth in government intervention that serves private rather than public purposes and interests.

### "Fixities" in household and government production functions

A rather different explanation for the growth of industrial policy in the 1970s focuses on the fact that households, as well as firms, are production units. In particular, this approach suggests that certain characteristics of the household production function may lead workers to oppose economic adjustment because for them it is an expensive process.

Much economic analysis focuses on how the firm adjusts to economic change. The rapidity with which adjustment takes place ultimately depends on technology, which is the principal determinant of the ratios of fixed to variable costs and specialized to non-specialized inputs.[1] This is an

1 According to orthodox economic principles, a firm will continue to operate, in the short run, so long as price is at least as great as average variable cost, implying that the greater the ratio of average fixed costs to variable costs, the harder it is for the firm to adjust.

incomplete view of the problem, however, since it overlooks the fact that many of the "variable inputs" utilized by firms are workers, who have two roles as far as production is concerned. First, as an input into the firm's production process workers help produce output, and second, as people workers produce utility for themselves by combining goods and time in utility-giving services and activities (see Becker 1965).

This approach to the theory of the household emphasizes not only the household's command over goods gained primarily from its labour services, but also the way in which the household uses and allocates time to create utility. As a result, both time and income become constraints in the utility maximization process. Essentially, the household is viewed as a production unit where inputs of goods, when combined with time, yield the utility-giving activity or service. Many of these goods constitute the household's nonhuman wealth, much of which is held in illiquid form. A crucial question raised by these considerations is whether a valid distinction can then be made among the goods in terms of the degree to which they are variable or fixed in the short run. We conclude that argument solely by analogy with the theory of the firm is not satisfactory. An alternate, and theoretically more convincing, approach makes use of the characteristics of portability and transferability to distinguish among commodities in a way that brings out the limitations on the household's ability to adjust to market changes.

Since the household uses its wealth to produce utility, we focus on its wealth function. The household's wealth function is composed of human and nonhuman capital (including physical assets, money, and non-money financial assets). The rapidity with which the household can adjust to economic change depends on the composition of its wealth. For example, if the household's wealth is held primarily in the form of physical assets or is comprised of a highly specialized form of human capital, its ability to adjust to economic change may be quite limited. This follows since the more portable and transferable[2] an asset is, the more quickly an economic agent can adjust to change by moving or selling it. To the extent that a household's assets are neither portable nor easily transferable, adjustment

2 Transferability refers to exchange. The exchangeability of an asset depends not only on the legal conditions surrounding the exchange, but also on the "thickness" or "thinness" of the market.

may involve heavy capital losses. If so, the household will resist adjusting, hoping either that economic conditions will again reverse themselves or that a better deal can be made by waiting. Consequently, the alternative that we suggest to the fixed-variable cost distinction, so appropriate to the firm, is one which focuses on the relative portability and transferability of a household's wealth. Changes in the size and composition of the household's wealth portfolio may thus provide one explanation for changes in the difficulty of industrial adjustment and, ultimately, in the demand for industrial assistance.

The simple taxonomy set out in Figure 1, which distinguishes between assets that are portable or nonportable and transferable or nontransferable, may help to clarify this point.

Figure 1
Classification of goods or assets

| | Easily Transferable | Limited or no transferability |
|---|---|---|
| Highly portable | Most commodities | Human capital |
| Limited or no portability | House | Employer pension plan<br>or<br>Home ownership in a declining single industry town |

Houses and nonportable employer pension plans typically comprise the greater proportion of a household's nonhuman wealth. Neither is portable: the pension is usually nontransferable and houses may be difficult to sell without a large capital loss. In these circumstances, the household will behave in the short run in much the same way as the firm with high fixed and low variable costs: it stays put -- and produces services as long as it can stave off bankruptcy.

This way of viewing the problem of adjustment provides a plausible explanation of why even firms and industries that are labour-intensive, have a high ratio of variable to fixed cost, and whose physical capital is composed primarily of (highly-portable) machinery and equipment may nevertheless pose economic adjustment problems and thereby command

political support for industrial assistance of some sort. The classic examples of such industries are clothing and textiles where the firms are often located in towns relying mainly on one or a very few major employers. It is not the firm that finds adjustment technically difficult (although it may resist adjustment because its shareholders face capital losses), but rather the households that supply the labour services. The household's production function may be "capital-intensive" even if the firm's is not.

The probability that adjustment will create capital losses for the household is directly related to the degree to which a household's human capital has limited adaptability, either because it is highly specialized or undertrained, and the degree to which the household's nonhuman capital takes the form of assets that are neither portable not easily transferable. The 1970s witnessed a rapid spread of employer pension plans, the continued increase in the importance of human capital, and a growth of home ownership, all of which are likely to have reduced the ease with which households can adjust to changing economic conditions.

In much the same way the "production function" (if it is possible to talk in these terms) of another important economic agent, government, may alter the perceived desirability of rapid industrial adjustment. Three levels of government should be considered in the Canadian context, but for the time being we will be concerned mainly with the utility and production functions of the provincial and municipal governments.

Two considerations are important in this analysis. First is the assumption -- once controversial but now commonplace -- that it is possible to distinguish the utility functions of private individuals from those of the government they elect (or the political-administrative agents that carry out governmental functions). Second is the observation that in the last fifty years all levels of government have grown in both absolute and relative (to private sector) terms. Growth at the lower levels of government has been especially rapid, with a significant expansion of urban services (e.g., water, sewage systems, roads) and of education and health care, all of which involve heavy capital expenditures.

Industrial decline in a region and the emigration it prompts will put severe financial pressure on those who remain behind if the jurisdiction's indebtedness is large. This problem is likely to be greatest for local governments, since a much higher proportion of their tax base is usually

committed to paying for capital equipment and structures than is true for higher levels of government.[3] Thus, net emigration can have important economic and financial consequences for municipal and, to a lesser extent, provincial governments.

With this in mind, one might expect to find that different levels of government regard economic adjustment differently. A federal program that underwrites the relocation of economic resources may not be viewed favourably by at least some local governments. Migration may be socially optimal from a national standpoint but not from a regional or local one. As a result, it is not surprising at this point in Canada's economic history that federal programs tend to be aimed at maintaining the viability of regions and locales in economic trouble. Two recent papers by Winer and Gauthier (1981) and Foot and Milne (1981) have in fact confirmed that government policy has discouraged migration (particularly from the Atlantic provinces).[4]

The inclusion of government as a separate agent in the analysis further complicates the problems posed by economic adjustment. We have already seen that inclusion of the household production function suggests that individuals may not be willing to move even if the firms for which they previously worked are relatively mobile. In addition, consideration of the government's own utility functions suggests that there may be political forces opposing economic adjustments that involve emigration, even when the people directly involved (job losers) are quite willing to move. Efficient industrial adjustment may therefore require compensation not only to persons who choose to migrate but also to those left behind, who face higher per capita costs of maintaining local facilities. Without such double subsidies the actual level of migration may exceed the optimal level, as Boadway (1981) has argued.

3 It should be noted, however, that a substantial portion of municipal revenue comes from provincial grants.

4 Canadian work on this question dates from Courchene (1970) who examined the effect of various government programs on interprovincial migration.

# 5
# AVENUES FOR FUTURE RESEARCH

While the Canadian debate on appropriate industrial strategies is older than Confederation itself, a pattern has developed. On the one hand, there are those who declare periodically that the Canadian economy has entered a crisis of one sort or another and can be saved only by elaborate public intervention, usually designed in explicit disregard of the influence of markets, costs, demands, supplies, and the like (see, for example, Britton and Gilmour 1978). On the other side are those who respond with the simplistic assertion that market processes are well able to determine the appropriate industrial structure for the country and that as a result all that is needed in the way of industrial policy is free trade. As is so often the case, both sides are probably partly right. Although the market may provide most of the diagnostic information an economy may need, it is obvious that the application of market remedies often causes considerable discomfort. On the other hand, while publicly sponsored adjustment (or anti-adjustment) policies presumably aim at reducing the discomfort of actual or potential victims of industrial change, it is not always clear that they have benign long-term effects on the patient.

An obvious way out of the normative rut, and probably the most appropriate route for economists in any case, is to concentrate on a positive analysis of industrial change. There is obviously much that is not known -- but should be known -- before safe judgements can be made about which course of treatment (if any) is likely to be best in the long run. The balance of the paper is therefore devoted to describing briefly several possible avenues for the positive analysis of both private and public adjustment mechanisms.

## Positive analysis of private adjustment processes

The analysis of private adjustment processes is straightforward, though at

times quite difficult. Shifts in demand, changes in technique, the introduction of new products, and the like, will confer benefits on some groups, usually consumers, and impose costs on others, usually some subset of producers. The task of the economic analyst is to take inventory of these costs and benefits.

The private costs of such adjustment processes generally take the form of lost jobs and losses in the capital values of private firms, some of which may even suffer bankruptcy as a result of adjustment. These costs are usually quite visible and a good deal of work has already been done in trying to estimate them. Perhaps the most important Canadian study of this kind was undertaken by the Department of Industry, Trade, and Commerce, which in a mid-1970s project traced the employment records of workers laid off during the closing of selected textiles and electronics firms in various parts of the country (see Canada 1979a). This sort of large-scale longitudinal study, which is only possible with the financial assistance of government, provides a wealth of information on the workings of the labour market. Other less ambitious attempts to assess the costs of industrial adjustment have also been undertaken for the textile and clothing industry (see Jenkins 1980; Jenkins and Golday 1979) and would clearly be desirable for other industries.

The benefits of private adjustment are often much more difficult to estimate. When an abrupt change in public policy occurs (when, for example, a tariff or quota is imposed or a marketing board is established) the implications of these actions for consumers are often relatively easy to estimate. On the other hand, when change takes place naturally, as it were, and over a longer period of time, the effects on prices are often harder to determine. When new techniques or products are introduced, for example, it may be extremely difficult to estimate the benefit to consumers.

In addition to private adjustment processes, governmental industrial policy also requires further positive analysis. Since the focus of this paper has been adjustment (or anti-adjustment) processes that take place under public sponsorship, the possibilities for research in this area will be examined in somewhat greater detail. It seems possible to distinguish at least six different areas for future work, although no doubt the following list is not exhaustive.

## Economic rationales for industrial policy

The theory of market failure is a well-tilled field. That little explicit theoretical consideration has been given to the relationship, if any, between market failure and industrial policy probably justifies one or two more passes of the plough, however. A special concern is whether current interventions are likely to improve markedly on market outcomes. In this regard, the approach suggested by Wolf, in which the relative costs of market and non-market failures are weighed, may prove useful (Wolf, 1979).

## Why the increased interest in industrial policy?

Several possible reasons for the apparent growth of industrial policies in the 1960s and 1970s were suggested earlier. Some of these hypotheses may in fact be testable. One obvious possibility is to regress financial assistance per employee (or per dollar of output) in different industries on labour productivity in the industry, its five- or ten-year growth rates of output and productivity, the extent of foreign ownership in the industry, its propensity to export, and similar variables. The fact that several Canadian jurisdictions now offer considerable financial assistance to promote industry suggests that useful comparisons of these results across provinces would be possible. The principal difficulty in any such analysis would be reconciling provincial (and federal) budget data with census data for manufacturing. It is also possible to test the "fixities hypothesis" presented above. Since this argument depends on the degree of liquidity of important assets, especially houses, which in turn depends largely on the geographic location of these assets, it would predict, other things equal, that industrial aid would be targeted at non-urban areas. This prediction might be tested by entering a geographic variable in the industrial cross-section described above or by running separate regressions with financial assistance data divided into geographic rather than industrial cross sections.

Several of the other hypotheses presented earlier, especially those concerning unique events in Canadian federal-provincial relations, are less adapted to empirical verification but can be elaborated in greater detail.

### Are declared policies internally consistent?

Useful work can be done examining how governments themselves view the role of the industrial policies they sponsor. On occasion the policy statements which accompany new initiatives do not appear to be logically consistent. When this is true it seems reasonable to expect that any accompanying policies will be less likely to form a coherent industrial strategy. A critical reading of what governments say their policies are supposed to do may therefore provide indirect evidence of the true purpose of such policies. Of course, it is always possible that poorly or even falsely rationalized policies will turn out to have been effective. At the very least, the growing body of government reports on industrial policy provides ample material for comparative study.

### What are the effects of industrial policy?

A careful inventory of the effects of existing industrial policies is an obvious prerequisite to their evaluation. The object of any such inventory is to ascertain how the world is different as a result of a policy's influence. This is obviously easier said than done. In some areas, in fact, the effect of policy has been, and is likely to continue to be, a matter of great controversy for many years. The debate on the effects of fiscal incentives on investment, for example, has gone on for several decades yet a resolution of even the most basic questions is nowhere in sight (see Bird 1980).

On other, perhaps narrower questions, however, the possibility of conclusive work seems greater. Jenkins' recent studies of the textiles and clothing industry and Borcherding's work on the effects of egg marketing boards are exemplary studies of the costs to consumers and benefits to producers of commercial policy and regulation respectively (see Jenkins 1980; Borcherding 1981). Similar studies of the effects of the other instruments of industrial policy listed above are also obviously called for, but until a considerably larger body of such case studies exists it will be all but impossible to arrive at any general conclusions regarding the influence or effectiveness of policy.

## Industrial policy or industrial strategy?

Careful inventory of the costs and benefits of even a fairly small sample of existing industrial policies will go a long way to providing the information necessary for an informed evaluation of these policies. Any such evaluation will require that at least three difficult questions be answered:

1. Assuming the declared intentions of each government policy are internally consistent, is the effect of this policy to further these intentions?
2. Are the several policies of government consistent with one another or do they work at cross purposes? If they are consistent, it is possible to think in terms of the government pursuing an industrial strategy. Of course, a problem arises here because governments may undertake apparently inconsistent actions in an attempt to diversify their industrial policy "portfolio".
3. Does any strategy appear to involve policies whose benefits are greater than their costs for the population as a whole, or only for some very small subset of it, such as a specific industry or a specific group of politicians or bureaucrats?

## Inter-governmental conflicts

Inter-jurisdictional inconsistencies and/or redundancies of policy are likely to be important in a country in which at least eleven separate jurisdictions appear to be pursuing their own independent industrial policies. A first step in examining this problem would be to determine whether the declared intentions of the various jurisdictions' governments were complementary or in conflict. A straight-forward listing of potential conflicts as suggested by official policy documents would be a useful beginning to the study of this problem.

A second and more difficult step would be to determine whether the various policies that are actually in place work in concert or at cross purposes. What governments do is usually more important than what they say. Tough federal-provincial rhetoric may dissolve into cooperation once

practical decisions have to be made. On the other hand, provinces engaged in province-building would seem to be in naturally competitive positions, whatever talk may emerge from conferences of first ministers about economic cooperation and complementary planning. Inter-jurisdictional bidding for the attention of large investors is as important a problem in the 20th century as it was in the 19th.

Much work will have to be done, however, before any useful estimate of the costs of this kind of behaviour can be arrived at.

Finally, more research is needed into the kinds of federal government policies that might reduce intergovernmental conflicts and the fragmentation of the Canadian common market that has resulted from province-building. Of particular interest would be the role of major federal transfer programs -- DREE and equalization, for example -- in the maintenance of a common economic purpose across the country.

This paper has obviously provided only the briefest summary of the useful research that can be done -- and in fact is being done to some extent -- on the effectiveness and desirability of industrial policies of one kind or another. The importance of such research should not be underestimated. In few areas of public concern do proposed governmental actions evoke, on the one hand, such dire predictions and, on the other, such extravagant claims. No doubt this is because the lack of reliable information on the subject encourages commentary based more on ideological predilection than on any realistic assessment of costs and benefits. If research on the problems posed by industrial adjustment and by industrial policies did nothing more than reduce the variation of professional opinion on the subject, this would be a major accomplishment.

Appendices

The following appendices set out industrial assistance programs provided by the Ontario, Quebec, and federal governments respectively. These lists are not meant to be exhaustive, but rather indicative of the massive number of programs available.

These lists have been compiled from various government documents but three basic sources should be highlighted:


Canada (1979b) Assistance to Business in Canada (Ottawa: Supply and Services)

Doherty, P.H., P.E. McQuillan, and R. Marc Sylvain (1979) Industrial Assistance Programs in Canada. 6th ed. (Toronto: CCH)

Johnson, J.P. (1980) Government Financial Assistance Programs in Canada (Toronto: Butterworth)

TABLE 12

Major programs of direct federal assistance to business (Millions of dollars in 1978-79 or latest year)

| | Grants & contributions | Loans | Loan guarantees/ Insurance | Total |
|---|---|---|---|---|
| Financing | | | | |
| Federal Business Development Bank | | 556 | | 556 |
| Regional Development Incentives | 77 | | | 77 |
| Small Business Loans | | | 200 | 200 |
| Farm Improvement Loans | | | 232 | 232 |
| Fisheries Improvement Loans | | | 27 | 27 |
| Farm Credit Corporation | | 513 | | 513 |
| Indian Economic Development Fund | 32 | 3 | 3 | 38 |
| Exports | | | | |
| Export Development Corporation | | | | |
| - Export Loans and Guarantees | | | (1071) | 1071 |
| - Export Insurance (value of goods) | | | 1299 | 1299 |
| Program for Export Market Development | 6 | | | 6 |
| Promotional Projects Program | 5 | | | 5 |
| Research and development and innovation | | | | |
| Industrial Energy R&D Program | 2 | | | 2 |
| Industrial Research Assistance Program | 18 | | | 18 |
| Enterprise Development Program | 26 | | | 26 |
| Defence Industry Productivity Program | 40 | 6 | | 46 |
| Program for Industry Laboratory Projects | 8 | | | 8 |
| Scientific and Techology Employment Program | 6 | | | 6 |
| Unsolicited Proposals Program | 14 | | | 14 |
| Cooperative Projects with Industry | 2 | | | 2 |
| Labour force | | | | |
| Canada Manpower Industrial Training | 84 | | | 84 |
| Job Experience Training | 45 | | | 45 |
| Adjustment assistance | | | | |
| Enterprise Development Program | | 6 | 120 | 126 |
| Canada Manpower Mobility Program | 12 | | | 12 |
| Canada Manpower Consultative Service | 3 | | | 3 |
| Adjustment Assistance Benefits | 3 | | | 3 |

SOURCE: Canada 1979b, 8

## APPENDIX A: ONTARIO GOVERNMENT PROGRAMS

Both this list and that for the Quebec government are organized by ministry granting the assistance.

A. Ministry of Industry and Tourism

1. Ontario Development Corporation
   Northern Ontario Development Corporation
   Eastern Ontario Development Corporation
   - provides financial assistance and advisory services to small business to stimulate industrial growth and economic activity in designated regions
   - uses incentive loans, term loans, tourist loans, and loan guarantees, and provides export assistance

2. Small Business Development Branch
   - three programs under the Assistance Programs Section
   (i) Program to Encourage Product and Process Innovation
   - grants up to 100 per cent of project costs

   (ii) Small Business Industry Technology Program
   - grants up to 50 per cent of project costs

   (iii) Product Development Management Program
   - grants up to 90 per cent of project costs
   - SBDB also provide advisory services and a Small Business Consulting Service

3. Small Business Development Corporation
   - direct funds and managerial expertise to eligible small businesses

4. Export '80
   - provide trade missions and trade fairs
   Ontario Export Development Corporation
   Office of Commercial Policy

5. Ontario International Corporation
   - identify major off-shore capital project opportunities
   - not a funding agency

6. Employment Development Fund
   - to encourage job creation and industrial development in Ontario via grants
   - five-year projections important
   - 1979-80 allocation was $200 million

7. Ontario Research Foundation (ORF)
   - provides technical assistance to companies
   - over past four years the government has committed over $15 million to the ORF

8. Tourism Redevelopment Incentive Program (TRIP)
   - guarantees loans and provides interest rate subsidies

9. encouraging film production
   - done through promoting tax advantages and location assistance to key international firm producers

10. Technological Assessment and Planning (TAP)
    - provides up to $3600 for preliminary technical assessment and planning

B. Ministry of Northern Affairs

1. Northern Communities Assistance Program
   - designed to support economic and social development of communities in Northern Ontario

2. Regional Priorities and Development Program
   - establishment of priorities for improvement of transportation and other services in Northern Ontario

C. Ministry of Agriculture and Food

1. Agriculture Manpower Services Branch
   - assists in identification, development and implementation of training programs

2. Federal-Provincial Agriculture Manpower Agreement
   - aid given to Ontario fruit, field-grown vegetable, and tobacco growers for construction and renovation of seasonal farm workers' accommodation

3. Crop Insurance Commission
   - offers contributory insurance against weather, insect, and disease damage

4. marketing boards
   - there are twenty-two marketing boards in Ontario

5. grants for farm development purposes
   - totalled $19.3 million in 1978-79

D. Ministry of Natural Resources

1. Ontario Mineral Exploration Assistance Program (OMEP)
   - provides grants and tax credits to encourage mineral production

2. Mines Division, Geological Branch
   - regulates program that allows one-third of cost of exploration program, to a maximum of $33,000, to be claimed by small or medium-sized businesses operating in certain districts

3. Woodlands Improvement Act
   - responsible for improvement of forests

E. Ministry of Culture and Recreation

- provides grants to organizations in pursuit of art

F. Board of Industrial Leadership and Development

- under this Board are nine ministries. To show the wide-ranging assistance programs available we list some of them here according to objective.

1. Electricity
   - Ontario Hydro to adopt a 20-year electrical generation program
   - GO rail transit system to be made electric (federal participation sought also)
   - the Toronto Transit Commission encouraged to make greater use of electricity through provincial subsidization
   - establish a Canadian Hydrogen Technology Centre to provide research into hydrogen as an alternative energy source

2. Transportation
   - additional support to the Urban Transportation Development Corporation (UTDC)
   - establishment of Alternative Transportation Fuels Program ($75 million over five years) to examine alternative transportation fuels
   - upgrade of rail service ($125 million over five years)
   - upgrading and expand of Ontario's three major shipyards ($50 million over five years)
   - establishment of an Ontario Harbour and Small Ports Commission to expedite port and related industrial development

3. Resources
   - introduction of special capital incentive for construction of new storage facilities for Ontario grown produce
   - acreage improvement fund established to provide financing for upgrading agricultural land in Northern and Eastern Ontario at favourable rates
   - Resource Machinery Advisory Board established to identify

manufacturing opportunities

- expanded exploration and development programs

4. Technology

- establishment of Innovation Development for Employment Advancement (IDEA) organization to promote development of new technologies, and increase supply of skilled manpower
- establishment of an Automotive Parts Technology Centre to aid in design and testing
- development of a CAD/CAM centre to assist manufacturers on a fee-for-service basis to develop and design this equipment
- increase funding for export financing program of the ODC to $50 million

5. People

- expansion of Training in Business and Industry Program (TIBI)
- grants to institutions to enhance skill development and industrial research
- worker mobility through portability of pensions

6. Community

- extension of the Tourism Redevelopment Incentive Program (TRIP) to expand and upgrade tourist facilities

APPENDIX B: Quebec Government Programs

This list is organized by ministry granting the assistance.

A. Ministére de l'Industrie, du Commerce et du Tourisme (MICT)

1. Programme d' integration de stagiares (stage d'été) (terminated in 1980-81)
   - to provide management tools to small and medium-size business (PME), while integrating future CEGEP and university graduates to PMEs
   - 420 firms benefited in 1979-80, from grants to 50 to 100 per cent of trainee salaries for 14 weeks

2. Programme Uni-PME
   - for manufacturing firms with fewer than 20 employees and Quebec head office. Firm must keep graduates for 24 months; 42 companies hired graduates in 1979-80
   - grant of 50 per cent of graduate's salary for first year, maximum grant $10,000

3. Aide au développement touristique
   - for any enterprise with a purchase, construction, improvement, or enlargement project. Acquisition of patents, licences, commissions, franchises, and their exploitation. Acquisition of bonds or shares of a similar enterprise, merger, or regrouping. Projects must be $20,000 or more, and situated in a geographic region determined by MICT. SDI plays a role on financial side
   - assistance may be in grants, loans, or loan guarantees

4. Programme visant à stimuler l'innovation dan l'industrie de la chaussure
   (innovation - chaussure)

- for all companies in footwear for at least one year, with 50 per cent of gross annual revenue from their own manufacturing activities. Must innovate in project, and thus increase sales outside Quebec or better resist imports. Deadline: December 31, 1981

- grants for project analysis, adaptation of productment methods to maximum $200,000

5. Programme visant à stimuler l'innovation dans l'industrie du meuble

(Innovation - meuble)

- same as for Innovation - chaussure, except in furniture sector.

Deadline: December 31, 1981

6. Programme d'expansion de l'entreprise manufacturiere innovatrice

- for all incorporated PME manufacturers with fewer than 500 employees and an innovation plan for production methods or marketing. Must be in business at least 3 years, have at least 10 per cent of sales outside Quebec, and enjoy dynamic status in its sector

- loans, repayment tied to program success. Maximum aid $500,000

7. Programme d'aide à la creation d'associations industrielles sectorielles

(PACASIQ)

- for persons or companies wanting to form an association to collectively promote economic and commercial interests (e.g., companies manufacturing similar or connected products)

- grants for part of initial organization and operating costs for no more than first four years. Up to 80 per cent of formation costs, max. $4,000. About $225,000 to help nine industry associations get started in 1979-80, and $235,000 to five existing associations

8. Aide aux commissariats industriels

- for regionally established industrial commissions, conforming

to certain criteria. Payment up to 50 per cent of operating expenses (max. $45,000). Grants to 52 commissions in 1978-79, totalling $1.4 million. In 1979-80, grants of $1.8 million to 51 commissions

9. <u>Aide financière à l'infrastructure</u> (part of Canada-Quebec agreement on industrial infrastructure)
   - infrastructure provided in advance to about 30 pre-chosen industrial parks, between now and 1982. Also to municipalities needing infrastructure for industrial projects creating at least 25 jobs or comprising a $500,000 investment

10. <u>Export assistance programs</u>
   - MICT has numerous programs aimed at boosting exports. They enable Quebec manufacturers to travel outside Quebec to promote export sales, buy or exchange new technology, participate in trade fairs, meet foreign buyers, or bring foreigners to Quebec. In some cases, the department itself pays exhibition, transportation and/or meeting expenses; in other cases, it simply pays travel grants and partial costs incurred. Among these programs:

11. <u>Expositions commerciales et industrielles - Missions commerciales -Missions d'accords industriels</u>

12. <u>Programme d'aide à la promotion des exportations</u> (APEX)
   - search for new markets, participate in expositions, promote Quebec cultural goods. In 1979-80, MICT aided 330 firms through APEX with following sectors prodominating: metal fabricating, machinery, furniture and fixtures, transportation equipment, clothing, foodstuffs, printing and publishing, rubber, and plastic products

13. <u>Programme pour l'accueil d'acheteurs étrangers</u>
   - to bring foreign buyers to Quebec
   - 43 missions brought to Quebec in 1979-80

14. Bill 48 (Bill on fiscal stimulants to industrial development)

- Fonds de relance industriel (terminated 1980-81)
- for enterprises with 200 employees or fewer, total assets of $7.5 million or less, paying revenue tax in Quebec and with 50 per cent of gross annual revenue from production activities
- Minister of Revenue may, in effect, reduce tax by 25 per cent

15. Dégrèvenment fiscal (1 April 1977 to 31 March 1980 only)

- for Quebec manufacturers paying Quebec revenue tax, except those in metropolitan Montreal area (and excepting natural resources transformation like pulp and paper, oil refining). Tax payable deductions (max. $500,000) for 25 per cent of admissible investment

16. Société général de financement (SGF)

- promotes investment and technological development by participating in joint ventures in growth sectors identified by MICT. Provides equity financing. Three priority sectors in 1979-80: electromechanics, forest products, and petrochemicals

17. Société de développment industriel du Québec (SDI)

- SDI and MICT work closely on many matters. MICT transfers money to SDI, and MICT minister approves SDI grants

18. Sociétés de développment de l'entreprise québécoise (SODEQ)

- part of MICT's mandate is to stimulate development of SODEQs

B. Ministère des Affaires culturels (MAC)

- a number of programs are available to assist the publishing industry. Some are aimed at publishing companies, other at universities, bookstores, etc. Most offer grants. Among the items subsidized are fixed printing costs, periodicals, promotional activities, distribution, and bookstores.

Among the programs:

Aide financière à l'édition

Assurance-édition

Aide financière aux periodiques

Aide aux grands travaux

Programme d'aide aux éditeurs pour la promotion du livre québécois

Programme d'aide aux éditeurs pour l'exportation et la distribution du livre québécois

Programme d'aide à la librairie

C. Ministère des Affaires intergouvernementales (MAIQ)

Cooperation économique franco-québécoise (ACTIM)

- for PMES in all sectors wishing to conclude cooperation agreements with French partners. Most costs paid

D. Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ)

1. Programme de rationalisation du secteur des viandes

   - for meat company or cooperative selling wholesale for human consumption; 35 per cent of costs reimbursed

   - A wide variety of programs is available for the fishing industry. Professional fishermen and/or approved producers and accredited ship-owners can apply for grants or interest-free loans for construction or purchase of boats, new motors, fishing equipment, repairs, insurance, and transportation of catches. Among the programs:

   Assurance Maritime

   Credit Maritime (purchase or repair of boats and equipment)

   Prêts (for boats, equipment and engines)

   Prime à la production des pêcheurs côtiers

   Service de base et infrastructure

   Subventions (for boats, motors)

   Subvention incitative à l'entretien préventif des bâteaux de pêche

   Transport du poisson

E. Ministère du Travail et de la Main d'Oeuvre

1. Formations et qualifications professionnelles de la main d'oeuvres

   - financial aid to companies that want to train their own personnel

2. Création d'emplois

- grants are available for different types of projects: to improve work environment, for work-sharing in the private sector, for training courses in industry, permanent job creation in small businesses, and projects for production of cultural goods and services
- includes Programme d'intégration des jeunes à l'emploi (PIJE)

F. Caisse de dépots et de placements du Québec (CDPQ)

- administers deposits of various government agencies, mostly investing in government bonds and public undertakings. Also authorized to buy (up to 30 per cent of ordinary) shares and bonds of companies, and also to negotiate loans. Usually interested only in $500,000 plus

G. Société de recuperation, d'exploitation et de développment forestier du Québec (REXFOR)

- among its objectives are the stimulation of forest industry development, and job creation. It can undertake equity financing with any public or private organization

H. Société québécoise d'initiatives agro-alimentaries (SOQUIA)

- to help food processing enterprises (Quebec-grown products only). Can provide equity financing, up to 50 per cent of a company's shares

I. Operation Solidarité Economique (OSE)

- to help Quebec economic agents (municipalities, associations, enterprises and citizens); profit from aid programs; stimulate the economy; encourage buying of Quebec products; support and create jobs, mainly in high-unemployment areas
- Programs for private investment, PME innovation (MICT), small manufacturing enterprise financing, and much more
- Programs 4, 5, and 6 under MICT above are part of OSE

J. Ministère de l'Immigration

Service des Immigrants entrepreneurs-investisseurs

- helps immigrants with capital to create, acquire, or become partners in Quebec companies
- equity financing

## APPENDIX C: FEDERAL GOVERNMENT PROGRAMS

### A. Financial Assistance Programs

Federal Business Development Bank

- crown corporation
- $556 million in loan authorizations in 1978
- most loans $100,000 or less; half $25,000 or less; average $50,000
- designed for "businesses which do not have other sources of financing available at reasonable rates"

Small Business Loans

- $200 million in guaranteed loans in 1978-79
- maximum of $75,000 outstanding at any one time
- small business means less than $1.5 million in gross revenues
- may be used to finance up to 80 per cent of cost of fixed or movable equipment; 90 per cent of purchase or construction of new premises

Small Business Loan Fund (Yukon)

Small Business Loan Fund (Northwest Territories)

Indian Economic Development Fund

- open to Indian farmers, guides, and fisherman, and Indians and established companies willing to locate manufacturing or processing facilities on Indian reserves
- grants of $32.2 million in 1978-79

Eskimo Loan Fund and Associated Financial Assistance Programs

- aid to Inuit-controlled enterprises

Export Development Corporation
- long-term loans for foreign borrowers to finance Canadian exports of "capital equipment and services"
- 1961-77 cumulative loans of over $4 billion
- provision of insurance to Canadian exporters
- insurance against loss incurred in foreign investment

Biomass Energy Loan Guarantees
- use of forest residues or municipal wastes for generating heat and electricity
- loan guarantee ceiling of $150 million

Canada Mortgage and Housing Corporation
- insured and direct loans to finance house building, acquisition, and renovation on "reasonable terms and conditions"

Residential Rehabilitation Assistance Program
- improve and repair substandard dwellings
- loans up to $10,000, up to $3750 of which may be forgiven

Graduated Payment Mortgages

Farm Improvement Loans
- term loans guaranteed for purchase of agricultural implements, livestock and additional loan, repairs to farm buildings, etc.
- maximum of $75,000 per farmer
- $232 million in new loans in 1978-79

Farm Mortgage Loans
- $389 million in new loans in 1978-79

Farm Syndicate Loans
- groups of farmers can get together and buy equipment
- $2.7 million in 1978-79

Crop Insurance
- shared-cost agreements with provinces

- federal contributions $72.3 million in 1978-79

Advance Payments for Crops
- up to $15,000 per farmer in advances

Fisheries Improvement Loans
- guaranteed loans of $90 million in 1978-79

Fishing Vessel Insurance
- low cost insurance for seaworthy fishing vessels
- 7204 vessels covered in 1977-78 and claims of over $2.5 million paid

Defence Industry Productivity Program
- assistance especially to projects intended to result in export sales
- contributions of up to half of R&D, machinery acquisitions, and other production costs
- $40 million in grants in 1978-79 and $6 million in loan guarantees

Enterprise Development Program
- replaces 7 older programs that were aimed at particular industries
- general assistance to small and medium-sized business
- designed to assist firms undertaking relatively high risk innovative or adjustment projects that can be expected to yield attractive rates of return on the total investment
- $26.2 million in grants, $6 million in loans, and $120 million in guaranteed loans 1978-79

Program for Export Market Development
- to help in participating in capital projects abroad, market identification or adjustment, participation in trade fairs outside Canada, the formation of export consortia

Footwear and Tanning Industries Adjustment Program
- sponsors design improvements in plants
- supports Footwear and Leather Institute of Canada
- scholarships for designers to study in Europe

Industrial Adjustment Assistance Program

- extended income support to workers affected by major employment disruptions directly associated with import competition (in the case of textiles and clothing) or arising from government restructuring assistance programmes (footwear and training)
- expenditures in 1978-79; $2.5 million

Promotional Projects Program

- organizes participation in trade fairs outside Canada, trade missions, and trade visitors
- federal support in 1978-79; $5 million

Industrial Incentives Program

- payments under Regional Development Incentives Act (RDIA) for establishment and improvements in specified areas
- ceiling of 20 per cent of capital cost for modernization, 25 per cent for new establishment
- through the Department of Regional Economic Expansion

Development and Demonstration of Resource and Energy Conservation Technology

Forestry Research and Development

Heavy Oil Development

- up to 50 per cent of capital costs payable by federal government
- $900,000 in 1978-79

Industrial Research Assistance Program

- pays salaries of researchers
- $18 million in 1978-79

Industry Energy Research and Development Program

- $1.5 million in 1978-79

Oilspill Research and Development Program

Program for Industry/Laboratory Projects

Program of Assistance to Solar Equipment Manufacturers

Project Research Applicable in Industry

Protein, Oil, and Starch Products Development

Renewable Energy and Conservation Development and Demonstration Program

Scientific and Technical Employment Program
- subsidize hiring of unemployment scientists, engineers, and technicians

Strategic Grants in Aid of Research

Agricultural Commodities Price Stabilization
- payments of $364.1 million in 1978-79, of which $293.6 million to Canadian Dairy Commission

Agricultural Fairs and Exhibitions Assistance

Agricultural Engineering Research and Development

Animal Disease Eradication

Canada Grains Council

Feed Grains Storage Assistance

Feed Freight Assistance Adjustment Fund

Feed Freight Assistance Program

Freight Charges Equilization

Grain Market Development

Income Stabilization -- Grain Producers

New Crop Development Fund

Prairie Farm Rehabilitation Administration

Assistance to Rapeseed Processors

Rapeseed Utilization Assistance Program

Aquatic Weeds Research and Development

Canadian Saltfish Corporation

Fish Chilling Facilities

Fisheries Research Support

Fishing Vessel Construction Assistance

Grants to Atlantic Salmon and Lobster Fishermen

Price Support for Fish

Salmonid Enhancement Program

Energy from the Forest Program

Forest Industry Renewable Energy (FIRE)

Prospectors' Assistance

Canada Manpower Consultative Service
- finance up to 50 per cent of costs of joint labour-management consultative committees that plan and oversee responses to actual or anticipated problems of skill redundancy or demand
- also subsidizes relocation costs

- budget for 1978-79 was $2.9 million

Canada Manpower Industrial Training Program
- provide direct training costs and trainee wages
- 1978-79 contributions: $85.7 million

Canada Manpower Training Program
- classroom training
- cost of training 1978-79: $343 million; trainee allowances: $198 million

Critical Trade Skills Training

Job Experience Training
- aimed at inexperienced workers
- $45 million in 1978-79

Small Business Intern Program
- $2.3 million in 1978-79

Canada Manpower Mobility Program
- 1978-79 budget: $11.8 million

Business Councils
- provide "guidance and resource information to increase the efficiency of small manufacturers and to raise the level and quality of local employment"

Canada Council Grants

Energy Systems Analysis

Design Assistance to Business

Fashion Design Assistance Program

Foreign Investment Assistance -- Developing Countries

Film Industry Assistance
- 1978-79 loans and investment of $4.5 million

Grants to Film Festivals in Canada
- 1978-79 grants of $150,000

Participation in Film Festivals Abroad

Home Insulation Assistance
- "funds available for 1978-79 were $56.2 million"

Labour education
- "This program assists officials and employees or organized labour to develop the knowledge and skills to more effectively discharge the responsibilities of the labour movement in the context of the Canadian economic, political, and social framework"
- Expenditures in 1978-79: $3 million

Northern Resources Roads Assistance

Purchase and Use of Solar Heating (PUSH) Program

Shipbuilding Assistance
- $94 million in 1978-79

Small Craft Harbours
- provides facilities for commercial fishermen and for recreational use - $30 million per year

Marina Assistance Program
- ensure provision of basic and essential harbour requirements for the safe mooring of recreational craft
- $1.8 million in 1978-79

Tourist Wharf Program

Workers' Tools-Metric Conversion Assistance
- $1 million per year

Oil Import Compensation Payments
- $631 million in 1978-79

Transportation Subsidies
- $745 million in 1978-79

## B. Information and Services

Canadian Commercial Corporation
- a crown corporation that assists the development of trade between Canada and other nations

Exports to Developing Countries
- CIDA

Import Analysis

Industry Sector Branches of Industry, Trade, and Commerce

Physical Distribution Advisory Service

International Trade Data Bank

Master Construction Specification

Office of Overseas Projects -- Export Assistance

Tourism Industry Assistance

Trade Commissioner Service

Canadian Institute for Scientific and Technical Information

Industrial Research Support

Space Industry Support

Technical Information Service

Wastewater Technology Centre

Research and Development on Housebuilding (CMHC)

Agriculture Information Services

Farm Building Plans Service

Fish Inspection Services

Fisheries Market Information and Support

Freshwater Fish Marketing Corporation

Forestry Services

Canadian Hydrographic Service

Energy Waste Detection

Exploration and Mining Services

Exploration and Development Information

Land Inventory and Land Use Management

Mineral and Energy Research and Development Services

Natural Resources Information

Remote Sensing

Water Management Data

Water Management Programs

Collective Bargaining Information Centre

Employment Services

Federal Mediation and Counselling Service

Interchange Canada Program
- provides for the temporary assignment of Public Service Executives to jobs in the private sector and vice versa

Labour Library and Information Services

Management Counselling -- Counselling Assistance for Small Enterprises (CASE)

Management Advisory Institutes Program

Management Advancement Program

Management Training for Small Businesses

Quality of Working Life Program

Small Business Information Service

Business Statistics

Canada Post Publications and Business Services

Health Protection Service

Inventors' Assistance Program

The Office for the Reduction of Paperburden

Crown Assets Disposal Corporation

National Film Board Technical Assistance

Weather Information Services

## C. Taxation Measures

Investment Tax Credit (including special R&D credits)

Accelerated Capital Cost Allowances
- for machinery and equipment used in manufacturing or processing
- for certain vessels
- for pollution control

Tax Reduction on Manufacturing and Processing Profits (from 36 to 30 per cent)

Small Business Deductions

Employment Tax Credit

Metric Conversion Cost Deduction

Incentives for the Mining, Oil, and Gas Industries

Business Investment Losses in Private Corporations

Inventory Allowance

Capital Gains Treatment of Stock Dividends

Employee Stock Options

Profit-Sharing Plans

Asset Replacements: Tax-free rollovers

Corporate Reorganizations

Intergenerational Transfer of Shares, Family Business Corporation

Transfers of Farm Property to Children

Cash Method of Reporting Income Applicable to Farmers and Fishermen

Sales and Excise Tax Exemptions

Reduced Sales Tax

Duty-Free Entry of Imported Goods

Remission of Duty and Associated Sales Taxes

Duty Drawback

Temporary Tariff Items (Reductions)

Countervailing Duty

Anti-Dumping Duty

Import Surtax

BIBLIOGRAPHY


Becker, G. (1965) "A theory of the allocation of time". Economic Journal 493-517

Biggs, M.A. (1980) The Challenge: Adjust or Protect? (Ottawa: North-South Institute)

Bird, R.M. (1980) Tax Incentives for Investment: The State of the Art Canadian Tax Paper No. 64 (Toronto: Canadian Tax Foundation)

Bird, Richard M., Meyer W. Bucovetsky, and David K. Foot (1979) The Growth of Public Employment in Canada (Montreal: Institute for Research on Public Policy)

Boadway, R. (1981) "Recent developments in the theory of regional economic policy in Canada". Paper presented at the Canadian Economics Association meetings, Halifax, N.S.

Boadway, Robin W. and Harry M. Kitchen (1980) Canadian Tax Policy (Toronto: Canadian Tax Foundation)

Borcherding, Thomas, with Gary W. Dorosh (1981) The Egg Marketing Board: A Case Study of Monopoly and Its Social Costs (Vancouver: The Fraser Institute)

Brenner, H. (1976) Estimating the Social Costs of National Economic Policy: Implications for Mental and Physical Health and Criminal Aggression Prepared for Joint Economic Committee, U.S. Congress (Washington: U.S. Government Printing Office)

Breton, A. (1974) A Conceptual Basis for an Industrial Strategy (Ottawa: Economic Council of Canada)

Breton, Albert and Anthony Scott (1978) The Economic Constitution of Federal States (Toronto: University of Toronto Press)

Britton, John and James Gilmour (1978) The Missing Link: A Technological Perspective on Canadian Industrial Under-Development (Ottawa: Science Council of Canada)

Canada (1978a) Department of Regional Economic Expansion Annual Report

1977-78 (Ottawa: Queen's Printer)

- (1978b) "A report by the second tier committee on policies to improve Canadian competitiveness". (Ottawa: Department of Industry, Trade, and Commerce)
- (1978c) Performance of Canadian Manufacturing Industries by Levels of Research Intensity (Ottawa: Minister of State for Science and Technology)
- (1979a) The Textile Industry -- A Canadian Challenge (Ottawa: Department of Industry, Trade, and Commerce)
- (1979b) Assistance to Business in Canada (Ottawa: Supply and Services)
- (1980) Securing the Canadian Economic Union in the Constitution (Ottawa: Supply and Services Canada)
- (1981) "Communities designated for adjustment assistance". Press release, March 10

Careless, A.G.S. (1977) Initiative and Response (Montreal: McGill-Queen's University Press)

Courchene, T.J. (1970) "Interprovincial migration and economic adjustment". Canadian Journal of Economics 3:4:550-576

Creighton, Donald (1967) The Road to Confederation (Toronto: Macmillan of Canada)

Daley, D.J., B.A. Keys, and E.J. Spence (1968) Scale and Specialization in Canadian Manufacturing Staff Study No. 21 (Ottawa: Economic Council of Canada)

Daly, D.J. and S. Globerman (1976) Tariff and Science Policies: Applications of a Model of Nationalism (Toronto: Ontario Economic Council)

Diebold, W. (1980) Industrial Policy as an International Issue (New York: McGraw-Hill)

Doherty, P.H., P.E. McQuillan, and R.M. Sylvain (1979) Industrial Assistance Programs in Canada (Toronto: CCH)

Economic Council of Canada (1975) Looking Outward: A New Trade Strategy for Canada (Ottawa: Information Canada)

- (1978) Living Together: A Study of Regional Disparities (Ottawa: Supply and Services Canada)

Foot, D.K. and W.J. Milne (1981) "Public policy and interprovincial migration: an econometric analysis for Canada" Paper presented at the Canadian Economics Association meetings, Halifax, N.S.

Green, A.G., (1971) Regional Aspects of Canada's Economic Growth (Toronto: University of Toronto Press)

Grossman, L. (1981) "Ontario's role in interprovincial co-operation". In Ontario and Canada: A Strategic Perspective, proceedings from a conference, Toronto

Haack, R.E., D.R. Hughes, and R.G. Shapiro (1981) The Splintered Market (Ottawa: Canadian Institute for Economic Policy)

Jenkins, G.P. (1980) Costs and Consequences of the New Protectionism (Ottawa: North-South Institute)

Jenkins, Glenn P. and Glenn Golday (1979) A Report on the Labour Force Training Project/Costs of Labour Adjustment Study (Ottawa: Department of Industry, Trade, and Commerce)

Johnson, J.P. (1980) Government Financial Assistance Programs in Canada (Scarborough: Butterworths)

Jordan, W.A. (1972) "Producer protection, prior market structure and the effects of government regulation". Journal of Law and Economics, April

Lalonde, Marc (1980) "Notes for an address to the Canadian Tax Foundation". Montreal, November 26

Laxer, James (1981) Canada's Economic Strategy (Toronto: McClelland and Stewart)

Lipsey, R.G. and K. Lancaster (1956-57) "The general theory of the second best". Review of Economic Studies 24

MacKintosh, W.A. (1964) The Economic Background of Dominion-Provincial Relations (Toronto: McClelland and Stewart)

Matthews, R. (1981) "Two alternatives explanations of the problem of regional dependency in Canada". Canadian Public Policy 7:2:268-283

McQuillan, P. and H. Taylor (1973) Sources of Venture Capital (Ottawa: Information Canada)

Melvin, J.R. (1975) The Tax Structure and Canadian Trade (Ottawa: Economic Council of Canada)

Ontario (1979a) Public Accounts, 1978-79

- (1979b) Budget (Toronto: Ministry of Treasury and Economics)
- (1980) Export '80 (Toronto: Ministry of Industry and Tourism)
- (1980) A Perspective on the 80's (Toronto: Ministry of Industry and Tourism)
- (1980c) Annual Report 1979/80 (Toronto: Ontario Development Cor-

porations)
- (1981a) Building Ontario in the 1980's (Toronto: Board of Industrial Leadership and Development)
- (1981b) Budget (Toronto: Ministry of Treasury & Economics)

Peltzman, S. (1976) "Toward a more general theory of regulation". Journal of Law and Economics autumn, 211-240.

Pestieau, Caroline and Judith Maxwell (1980) Economic Realities of Contemporary Confederation (Montreal: C.D. Howe Research Institute)

Phillips A. (1974) "Industrial Concentration and Public Policy: A Middle Ground". In Industrial Concentration: The New Learning, edited by H. Goldschmind, H. Mann, and J.F. Weston (Boston: Little Brown)

Quebec (1974) Une Politique économique québécoise (Quebec City: Ministére de l'Industrie et du Commerce)
- (1979a) Public Accounts, 1978-79
- (1979b) Batir le Québec (Quebec City: Ministére du développement économique

Raynauld, A. (1970) La propriété et la performance des entreprises dans la province du Québec Revue Etudes internationales

Rea, K.J. and J.T. McLeod (1976) Business and Government in Canada (Agincourt: Methuen)

Safarian, A.E. (1980) Ten Markets or One? Regional Barriers to Economic Activity in Canada (Toronto: Ontario Economic Council)

Saunders, R.S. (1981) Permanent Layoffs: Some Issues in the Policy Debate (Toronto: University of Toronto Press for the Ontario Economic Council)

Science Council of Canada (1971) Innovation in a Cold Climate: The Dilemma of Canadian Manufacturing (Ottawa: Information Canada)
- (1979) Forging the Links: A Technology Policy for Canada (Ottawa: Supply and Services)

Shepherd, J.J. (1980) "An industrial strategy for Ontario". In Ontario and Canada: A Strategic Perspective, proceedings from a conference, Toronto

Shoup, C.S. (1977) "Interregional economic barriers: the Canadian provinces". In Intergovernmental Relations (Toronto: Ontario Economic Council)

Simeon, R. (1977) "The federal-provincial decision making process". In Intergovernmental Relations (Toronto: Ontario Economic Council)

Starks, R. (1978) Industry in Decline (Toronto: Lorimer)

Stegemann, K. (1973) Canadian Non-Tariff Barriers to Trade (Montreal: C.D. Howe Research Institute)

Stigler, G.J. (1971) "The Theory of Economic Regulation". Bell Journal of Economics and Management Science 3-21

Trebilcock, M.J., L. Waverman, and J.R.S. Prichard (1978) "Markets for regulation". In Government Regulation, Issues and Alternatives 1978 (Toronto: Ontario Economic Council)

Trebilcock, M.J., D. Hartle, R. Prichard, and D. Dewees (1980) "The Choice of a governing instrument". (Toronto: Economic Council of Canada) Mimeo.

Tullock, G. (1975) "The transitional gains trap". Bell Journal of Economics, Autumn.

Usher, D. (1975) "Some questions about the Regional Development Incentives Act". Canadian Public Policy, Autumn 557-575

Vanderslice, T.A. (1977) Technology in the U.S.: New Findings on Impact Out to 1990 (Connecticut: General Electric Company)

Winer, S.L. and D. Gauthier (1981) "Internal migration and the fiscal structure of the federation". Paper presented at the Canadian Economics Association meetings, Halifax, N.S.

Wonnacott, R.J. (1975) Canada's Trade Options (Ottawa: Economic Council of Canada)

Wonnacott, R.J. and P. Wonnacott (1980) "Free trade between the U.S. and Canada: fifteen years later". Working Paper No. 8011, Centre for the Study of International Economic Relations, University of Western Ontario

Woodward, R.S. (1975) "The effectiveness of DREE's new location subsidies". Canadian Public Policy Spring

Wolf, Charles (1979) "Non-market failure". Journal of Law and Economics October

# Ontario Economic Council Discussion Papers

**An Economic Analysis of the Hall Commission Report**
A. Abouchar

**Emerging Problems in Post-Secondary Education**

**The Northern Dilemma: Public Policy and Post-Secondary Education in Northern Ontario**
D. M. Cameron

**The Pension Fund Debate**
R. M. MacIntosh and J. F. Chalcraft

**Issues in Intergovernmental Relations**

**Reforming Planning in Ontario: Strengthening the Municipal Role**
J. Bossons

**Public Policy and Future Population in Ontario**
D. K. Foot

**The Elimination of Mandatory Retirement: An Economic Perspective**
J. E. Pesando

**Current Issues in Political Economy**
Arthur M. Okun and Robert Solomon

**Class Actions as a Regulatory Instrument**
D. N. Dewees, J. R. S. Prichard and M. J. Trebilcock

**Nuclear Power at Ontario Hydro: A Case Study in Technological Innovation**
F. Tapon and T. J. Osborne

**Ten Markets or One? Regional Barriers to Economic Activity in Canada**
A. E. Safarian

**Unemployment among Young People and Government Policy in Ontario**
Morley Gunderson

**Unemployment Insurance and Work Effort: Issues, Evidence, and Policy Directions**
Derek P. J. Hum

**Housing Policy for the 1980s**
G. B. Fallis

**Municipal Fiscal Reform in Ontario: Property Taxes and Provincial Grants**
John Bossons, Michael Denny, and Enid Slack

**Permanent Layoffs: Some Issues in the Policy Debate**
Ronald S. Saunders

**Commentaries on the Haley Report on Pensions**
Louis Ascah, Robert Baldwin and James Pesando

**Commentaries on the Hall Report**
Richard M. Bird and Roderick D. Fraser

**The Canadian Charter of Rights and Freedoms, 1981**
Donald Smiley

**Industrial Policy in Ontario and Quebec**
Paul Davenport, Christopher Green, William J. Milne, Ronald Saunders, and William Watson

Copies of these publications are available at a nominal charge from the Ontario Government Bookstore, 880 Bay Street, Toronto to those shopping in person. Out-of-town customers may write: Publications Section, Fifth Floor, 880 Bay Street, Toronto, Ontario, M7A 1N8, or telephone 965-6015 (toll-free long distance, 1-800-268-7540; in northwestern Ontario, O-Zenith 67200).

ISSN 0702-0643 ISBN 0-7743-6971-X